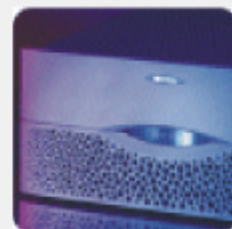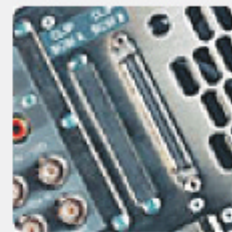# PixelPower
broadcast graphics solutions

CG Tools, Supporting Applications and Tools Reference

H059W004

CG Tools, Supporting Applications and Tools

CG Tools, Supporting Applications and
Tools Reference - H059W004_Rev02_D,
DRAFT D, CG Tools version 7.1.2.1,
10/10/2006

10/10/2006, 14:58

Copyright Notice

Disclaimer

Copyright © 2000-2006

PixelPower
broadcast graphics solutions

PIXEL POWER PROGRAM LICENSE AGREEMENT

PLEASE REVIEW THE FOLLOWING TERMS AND CONDITIONS CAREFULLY BEFORE USING THE SOFTWARE PROVIDED ON THIS CD-ROM, WEBSITE, OR OTHER MEDIUM. BY USING THIS SOFTWARE YOU INDICATE YOUR ACCEPTANCE OF SUCH TERMS AND CONDITIONS, WHICH CONSTITUTE THE LICENSE AGREEMENT (the "AGREEMENT") BETWEEN YOU AND PIXEL POWER LIMITED ("PPL"). IN THE EVENT THAT YOU DO NOT AGREE WITH ANY OF THESE TERMS AND CONDITIONS, DO NOT DOWNLOAD, COPY, OR USE THIS SOFTWARE; IF YOU HAVE RECEIVED A COPY ON CD-ROM OR ANOTHER MEDIUM, PLEASE PROMPTLY RETURN THE SOFTWARE UNUSED TO PPL.

1. Definitions

Program(s):means whichever features of the software are enabled by the software protection mechanism corresponding to the configuration you have licensed.

2. License to the Program

By this Agreement, PPL grants to you a non-exclusive license to use the Program(s) (and any updates to the Program(s) which you may acquire from PPL) on the terms and conditions outlined in this Agreement. Any unenabled features of the software are unlicensed and you agree not to use or access such features. The Program(s), and any unenabled features of the software are confidential and proprietary to PPL and its licensors, and PPL and its licensors retain all title, copyright, patent and other proprietary rights to the Program(s) and any unenabled features of the software and all copies thereof.
Pursuant to this Agreement, you may use the Program(s) for which you have obtained a license (hereinafter collectively referred to as the "Licensed Programs") on a single computer (or on networked workstations if you have purchased a floating node license).

YOU MAY NOT USE, COPY, MODIFY, OR TRANSFER THE LICENSED PROGRAMS IN WHOLE OR IN PART, EXCEPT AS EXPRESSLY PROVIDED FOR IN THIS AGREEMENT. IF YOU TRANSFER POSSESSION OF ANY COPY OF THE LICENSED PROGRAMS TO ANOTHER PARTY EXCEPT AS EXPRESSLY PROVIDED HEREIN, YOUR LICENSE IS AUTOMATICALLY TERMINATED. YOU MAY NOT DECOMPILE, DISASSEMBLE OR OTHERWISE ATTEMPT TO ACCESS THE SOURCE CODE OF THE PROGRAM(S).

3. Terms

The license is effective until terminated. You may terminate it at any time by destroying the Program(s). It will also terminate upon conditions set forth elsewhere in this Agreement or if you fail to comply with any term or condition of this Agreement. You agree upon such termination to destroy the Program(s).

4. Limited Warranty and Remedies

PPL warrants that the Program(s) will perform substantially in accordance with PPL's current program documentation for a period of ninety (90) days from the date of delivery to you, as evidenced by a copy of your receipt. PPL warrants the compact disc(s) on which the Programs are furnished to be free from defects in materials and workmanship under normal use for a period of ninety (90) days from the date of delivery to you, as evidenced by a copy of your receipt. This warranty is limited to you and is not transferable.

During the 90-day warranty period, (1) PPL will replace any Program or compact disc not meeting the foregoing warranty and which is returned to PPL or an Authorized PPL Distributor ("Authorized Distributor") with a copy of your receipt. Any replacement Program(s) or compact discs will be warranted for the remainder of the original warranty period or thirty (30) days, whichever is longer.

THE FOREGOING WARRANTY DOES NOT EXTEND TO ANY COMPACT DISC WHICH HAS BEEN DAMAGED AS A RESULT OF ACCIDENT, MISUSE, ABUSE, OR AS A RESULT OF SERVICE OR MODIFICATION BY ANYONE OTHER THAN PPL OR AN AUTHORIZED DISTRIBUTOR.

EXCEPT AS EXPRESSLY SET FORTH ABOVE, NO OTHER WARRANTIES, EITHER EXPRESS OR IMPLIED, ARE MADE WITH RESPECT TO THESE PROGRAM(S), INCLUDING, BUT NOT LIMITED TO, IMPLIED WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE, TITLE AND NONINFRINGEMENT, AND PPL EXPRESSLY DISCLAIMS ALL WARRANTIES NOT STATED HEREIN. YOU ASSUME THE ENTIRE RISK AS TO THE QUALITY AND PERFORMANCE OF THE LICENSED PROGRAMS. SHOULD THE LICENSED PROGRAMS PROVE DEFECTIVE, YOU AND NOT PPL OR AN AUTHORIZED DISTRIBUTOR ASSUME THE ENTIRE COST OF NECESSARY SERVICING, REPAIR, OR CORRECTION.

PPL DOES NOT WARRANT THAT THE FUNCTIONS CONTAINED IN THE LICENSED PROGRAMS WILL MEET YOUR REQUIREMENTS, OR THAT THE OPERATION OF THE LICENSED PROGRAMS WILL BE UNINTERRUPTED OR ERROR FREE. YOU ALSO ASSUME RESPONSIBILITY FOR THE SELECTION OF THE LICENSED PROGRAMS TO ACHIEVE YOUR INTENDED RESULTS AND FOR THE INSTALLATION, USE, AND RESULTS OBTAINED FROM THE LICENSED PROGRAMS.

YOUR SOLE REMEDIES AND PPL'S ENTIRE LIABILITY ARE AS SET FORTH ABOVE. IN NO EVENT WILL PPL BE LIABLE TO YOU OR ANY OTHER PERSON FOR ANY DAMAGES, INCLUDING ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES, EXPENSES, LOST PROFITS, LOST SAVINGS, OR OTHER DAMAGES ARISING OUT OF THE USE OF OR INABILITY TO USE THE LICENSED PROGRAMS.

To the extent that the Program(s) are derived from third-party software, no such third party warrants the Licensed Program(s), assumes any liability regarding use of the Program(s) or undertakes to furnish you any support or information relating to the Program(s).

5. Representations

PPL has the right to enter into this Agreement. With the exception of any portions of the Program(s) that are licensed by PPL from third parties, the Program(s) are proprietary to PPL. PPL is not aware of any claim of infringement with respect to the Program(s).

6. General

Under no circumstances shall PPL be liable to any party in an amount beyond the license fee for the Licensed Programs covered by this Agreement.

You may not sub-license, assign, or transfer the license, the Program(s), or disclose any trade secrets embodied in the Program(s) except as expressly provided in this Agreement. Any attempt otherwise to sub-license, assign, or transfer any of the rights, duties, or obligations hereunder is void.

This Agreement is entered into for the benefit of PPL and its licensors and all rights granted to you and all obligations owed to PPL shall be enforceable by PPL and its licensors.

If you have any questions concerning this Agreement, including software maintenance or warranty service, you should contact Pixel Power Limited, College Business Park, Coldhams Lane, Cambridge, CB1 3HD, England.

This Agreement will be governed by English law.

BY USING THE PROGRAM(S) YOU ACKNOWLEDGE THAT YOU HAVE READ THIS AGREEMENT, UNDERSTAND IT, AND AGREE TO BE BOUND BY ITS TERMS AND CONDITIONS; YOU FURTHER AGREE THAT IT IS THE COMPLETE AND EXCLUSIVE STATEMENT OF THE AGREEMENT BETWEEN YOU AND PPL WHICH SUPERSEDES ANY PROPOSAL OR PRIOR AGREEMENT, ORAL OR WRITTEN, AND ANY OTHER COMMUNICATIONS BETWEEN YOU AND PPL RELATING TO THE SUBJECT MATTER OF THIS AGREEMENT.

Contents

Contents

2   What's new?

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

6   Getting started

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03 CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

Contents

Contents

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

Contents

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Contents

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Contents

Contents

14   Glossary

![PixelPower - broadcast graphics solutions]

Section 1

Welcome

1.   Welcome

Welcome to the CG Tools Reference and thank you for purchasing a Pixel Power product. This section details:

- more information about this documentation ⌐4⌐;
- readership assumptions ⌐4⌐;
- information about registration, training and upgrades ⌐5⌐;
- documentation conventions ⌐5⌐;
- more information about Pixel Power CG Tools based products ⌐7⌐.

1.1   About this documentation

This documentation provides both an in-depth guide to the features and functionality of the CG Tools software and also a day-to-day reference to the software's user interface including menus ⌐378⌐ and dialog boxes ⌐554⌐. It also documents changes to each periodic CG Tools software release and resulting changes to this reference ⌐52⌐.

It is designed to be a learning tool for those new to the CG Tools software, as well as a reference for experienced operators. Experienced operators may not want to read the entire manual, but may refer to the contents or index for specific information.

If you are new to CG Tools products, especially if you are new to using a character generator, we recommend that you read the PDF version fully to familiarize yourself adequately.

An reasonable investment in time now may save time later.

1.2   Readership assumptions

The following readership assumptions are made:

- Completion of hardware platform installation ⌐4⌐
- Software and broadcast knowledge ⌐4⌐

1.2.1   Completion of hardware platform installation

This documentation assumes that the desired hardware platform has been correctly installed (whether it be a Clarity system unit or a PC that will run Clarity PREP software) and that the software (CG Tools) is operating correctly and able to obtain a licence. These processes are documented in other publications in the CG Tools documentation range. See Manuals and guides ⌐105⌐ for more information.

SEE ALSO

About current CG Tools products ⌐7⌐
Basic configuration and system test ⌐122⌐

1.2.2   Software and broadcast knowledge

This documentation assumes that the reader has a reasonable amount of knowledge and/or experience in the field of on-air and post-production character and graphics generation and that they have a working knowledge of the Microsoft® Windows NT® , Windows 2000® or Windows XP® operating system and its conventions. Refer to the Microsoft website (http://www.microsoft.com) for more information on these operating systems.

1.3 Registration, training and upgrades

Enclosed with the product is a Product Registration Form. We suggest that you fill in the form and fax it back to us as soon as possible. Registration will entitle you to free upgrades for a year and enable us to inform you of new releases and training courses as they become available. You can also access a product registration online via:

http://www.pixelpower.com/support_product_registration.html

Pixel Power offers comprehensive training courses on all aspects of the CG Tools software either at the factory in Cambridge or on site world-wide. Personal training programmes can also be structured to suit an individual organisation's requirements. Regular scheduled courses are also run at the BBC's residential training centre, the CBST at Wood Norton, near Evesham. For more information on training, see:

http://www.pixelpower.com/resources_training.html

The widespread availability of broadband internet access now makes it practical to use online mechanisms as our primary method of distributing software updates to customers. For more information on software updates, see:

http://www.pixelpower.com/resources_downloads.aspx

1.4 Documentation conventions

This documentation follows some simple conventions to improve its readability. This includes:

- Definitions | 5 |;
- Typography | 5 |;
- Graphical User Interface (GUI) terminology | 6 |.

1.4.1 Definitions

The following definitions will be referred to from hereon:

Term	Description
You	Person or persons using the product.
We	Pixel Power Ltd., Pixel Power Inc.
CG Tools	Generic software name for all products.
Clarity	The full editing and playout product as whole i.e. both hardware and software.
Clarity hardware, Clarity system unit or Clarity Server.	The hardware part of the Clarity product.
Clarity PREP	The off-line editing software to be used specifically for the production of material for use with a Clarity system.
Clarity Plugin	A version of the Clarity PREP software that runs as an AVX plugin within the Avid® Media Composer or Symphony editing environment.

1.4.2 Typography

The following typographical conventions will be used from hereon:

Example	Description
Courier	File names, folder names, path names, example script, functions, parameters and variables for drop-down list boxes | 6 |, increment boxes | 6 | and text boxes | 6 |.
CTRL + S	Press a key (or key combination) on the keyboard.
<name> RapidAction key	Dedicated Rapid Key shortcut for the Optional Version 2 RapidAction keyboard |183|. Click on the link to jump to a description for the key.
<name> RapidAction key	Dedicated Rapid Key shortcut for the Optional Version 1 RapidAction keyboard |179|. Click on the link to jump to a description for the key.
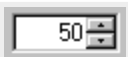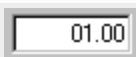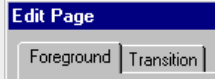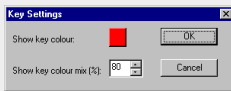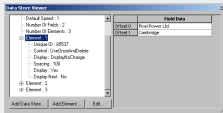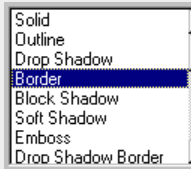
Example	Description
	Related tool that performs the described function. Click on the tool to link to the related toolbar and description.

1.4.2.1 Product derivative heading labels

Sections that are only relevant to Clarity systems will have the [CLARITY] label in the section heading; sections only relevant to Clarity PREP will display the [CLARITY PREP] label; sections only relevant to Clarity PLUGIN will display the [CLARITY PLUGIN] label.
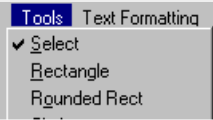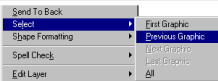
1.4.3 Graphical User Interface (GUI) terminology

The following terms for GUI components will be referred to from hereon:

Identification	Name	Purpose/description
	Increment box	Enables the input of integers using either the cursor or up/down arrows.
	Text box	Enables the input of text or numerical values using the keyboard.
	Slider bar	Enables the selection of an integer from a pre-defined range.
	Dial control	Enables the selection of a direction/angle value from a pre-defined range.
	Dialog or Control tab	A section of a dialog or control box containing properties grouped by topic. Select a tab by clicking on its heading.
	Group box	Sub-section of a dialog or control box containing options pertinent to the group box heading.
	Radio button	Enables the selection of an option contained within a group box.
	Dialog box	A window that is displayed when the CG Tools software needs additional information to perform an action or command. Dialog boxes always remain in view until the action has been completed or cancelled.
	Control box	Similar in look to dialog boxes, control boxes provide access to grouped functionality. They can remain in view or hidden.
	Drop-down list box	Enables the selection of an option from a pre-defined range.
	List Box	Enables the selection of an option from a pre-defined range.

Identification	Name	Purpose/description
	Tool	Performs an action or displays a dialog box or control box.
	Toolbar	Group of tools that access a particular area of software functionality.
	Menu	Group of commands that access a particular area of software functionality pertinent to the menu heading.
	Shortcut menu	Group of commands that are displayed by clicking the right mouse button on an area of the user interface.
	Sub menu	Group of commands that are displayed via a command in a menu or shortcut menu.

1.5 About current CG Tools products

All software products originate from the CG Tools software suite and the software product is selected depending on your chosen application.

Learning more about hardware platforms 7
Output via dedicated video hardware 7
Output previewed via software user interface or created for hardware based systems 8
Software derivatives 8
Basic standard features for all products and derivatives 9
Optional licensed features and other product options available for one or more products or derivatives 13

1.5.1 Learning more about hardware platforms

Information regarding hardware platforms is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Product Overview and Features

If you have purchased Clarity hardware, you should have received a paper copy of this publication. If you have purchased just software, a .PDF version will have been installed as part of the CG Tools software installation and is available from the Help 434 menu.

Contact Pixel Power Technical Support 103 if you require further information.

1.5.2 Output via dedicated video hardware

1.5.2.1 Clarity HD/SD

Clarity is a Microsoft Windows XP® based High Definition (HD) and/or Standard Definition (SD) on-air and post-production graphics software application to be installed and used on Clarity system units (e.g. Clarity 100, 200, 300, 3000, 500 and 5000).

1.5.3   Output previewed via software user interface or created for hardware based systems

The powerful character generation tools of our Clarity software are made available for pre-production. Running stand-alone (Clarity PREP) or as a plug-in (Clarity Plugin) within an NLE environment, the software shares the rich CG and graphics toolset developed for Clarity HD/SD, making it the most flexible and efficient way to prepare high quality text and graphics.

SEE ALSO

Clarity PREP | 8 |
Clarity Plugin | 8 |

1.5.3.1   Clarity PREP

Clarity PREP is a Microsoft Windows NT/2000/XP® based High Definition (HD) and Standard Definition (SD) off-air and post-production graphics solution comprising of editing software without dedicated graphics hardware (a Clarity system unit and peripherals).

It is designed for the following applications:

- the preparation and saving of Clarity HD/SD jobs;
- the preparation and rendering of material for other non-linear edit systems e.g. Avid® and Discreet software.

The software offers all the text handling power that you expect from a real broadcast character generator. The new Graphic Tools | 266 | enables you to instantly define font, size, edge, shadow, texture and transparency. Text styles may be saved as presets to ensure consistency and allow global style changes during revisions. Text fields allow the creation of templates making common pages such as lower third displays fast and easy to create with absolute consistency. Clarity PREP, used standalone in conjunction with Avid® Media Composer or Symphony, enables media content to be created and either stored in a job file for later recall within the Avid® Media Composer or Symphony, or saved as images with alpha channels and then imported into Avid® Media Composer or Symphony.

Rolls, crawls and other animated pages may be previewed at full resolution in the VGA display before being exported as image sequences, native Clarity clips, AVI, Quicktime or OMF files. Clarity PREP, when running alongside the Avid® Media Composer or Symphony editing software, integrates with the Avid® timeline as an AVX plug-in, enabling the recall, creation and editing of pages in Clarity PREP alongside your usual editing environment.

1.5.3.2   Avid AVX Plugin (Clarity Plugin)

Avid AVX Plugin (Clarity Plugin) is a version of the Clarity PREP software that runs as an AVX plugin within the Avid® Media Composer or Symphony editing environment. It is file compatible with Clarity hardware systems allowing you to leverage graphic assets uniformly throughout your facility. Advanced features like automatic subtitling from EBU or ASCII files make the editing process efficient. Providing the Clarity software feature set within the NLE environment enhances editing productivity and ensures consistent graphic presentation from post-production through to live production.

1.5.4   Software derivatives

There are three derivatives available within the Clarity, Clarity PREP and Clarity Plugin software products.

TG | 9 | derivatives offer basic text generator functionality, while CG | 9 | character generator derivatives provide more advanced functionality including cel animations | 18 |, cool moves | 20 |, enhanced shapes | 23 |, live push back 2D DVE | 25 |, mattes | 25 |, picture cut and paste | 26 |, smart moves | 32 |, software playout | 32 |, still store | 32 |, subtitling and RS422 control | 33 |, text spline | 33 | and video grab | 34 |.

In addition to the features found in CG derivatives, GX | 9 | specification adds a comprehensive integrated paint system with freehand brushes | 24 |, ramcorder (rotoscoping) | 29 | and VTR control | 35 |.

NOTE

- The Pixel Power design philosophy is that any material created on our full featured systems (CG or GX) can be played out on entry level systems (TG), regardless of complexity, animations or effects.
- The TG | 9 | derivative is not available with Clarity PREP and Clarity Plugin software products.

1.5.4.1 TG

Designed as a fast and reliable text generator, TG is also ideal for playout of graphics prepared on either CG or GX derivatives, and offers a streamlined feature set optimised for live-to-air applications. Ideal for connection to automation and newsroom systems, TG provides a fast, reliable and flexible basic text generator at the heart of your production system.

1.5.4.2 CG

CG builds on the feature set available in TG to offer a fully featured character generator with a tightly integrated still store. This gives you access not only to a comprehensive suite of character generator functions, but also the tools to create a vast range of visually stunning and sophisticated graphics. CG features Cool Move [462] and Smart Move [532] animation effects for text and logos, as well as cut and paste for image manipulation. With the standard Rapid Action keyboard [183], the most common character generation functions are just a single keystroke away, making CG ideal for live broadcast environments, including control rooms, master control and remote production vehicles. Standard automation interfaces make CG an easy fit into sophisticated news and live sports environments.

1.5.4.3 GX

Designed with the graphic artist in mind, GX is aimed at the graphics production area in a larger broadcaster or as a multipurpose graphics powerhouse in a smaller facility. GX provides much more than a dedicated character generator. Tight integration of paint and character generation tools streamlines your workflow, making GX exceptionally flexible and productive.

1.5.5 Basic standard features for all products and derivatives

The following basic features are standard on all products and derivatives as shown in the table below.

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
■	■	■	■	■	■	■	■	■	■	■	■	■

SEE ALSO

500 TrueType fonts [10]
Background picture file import/export [10]
Cel animation playout [10]
Clip store emulation [10]
Edge effects [10]
Logo fonts [10]
Logos [11]
Page transitions [11]
Shapes [11]
Spell checker [11]
Standard moves [11]
Text tabulation and margins [12]
Templates (Field markers) [12]
Text import [12]
Text line [12]
Text page [12]
Transparency and shading [13]
Unlimited foreground layers, zooming, grids, safe areas and undo/redo [13]
Variable speed rolls and crawls [13]

1.5.5.1   500 TrueType fonts

500 high quality Bitstream Postscript Type 1 fonts, pre-installed on the internal hard disk with Clarity and supplied on CD-ROM as part of the CG Tools installation. Additional Postscript Type 1 or TrueType fonts can be installed. Fonts are rendered in real-time directly from the Postscript or TrueType master, allowing style and size changes to be made quickly. Font selection is available via standard Microsoft Windows font selection methods. Characters not legended on the keyboard can be inserted using the symbol table. This facility is particularly useful for Dingbats, Windings and other symbol fonts.

1.5.5.2   Background picture file import/export

A wide selection of industry standard file formats can be imported and exported via disk or network. Formats supported include TIFF, TGA, CGM, Kodak Photo-CD and a range of custom formats defined by other broadcast equipment manufacturers.

SEE ALSO

Background dialog tab 756

1.5.5.3   Cel animation playout

Enables compiled cel animations to be played out.

SEE ALSO

Cel Playback Settings control tab 274

1.5.5.4   Clip store emulation

Enables you to specify a path that the current system will use to mimic a clip drive within a Clarity unit and whether missing clips are retrieved. Also enables configuration of how clips that are being transferred by the job copy mechanism are accepted by the host system and how the host system will react when loading a job that was previously copied to a PC file system (along with any associated .PPV files).

SEE ALSO

Clip Store Emulation dialog tab 710

1.5.5.5   Edge effects

Edge effects can be applied instantly to text, shapes and cutouts with independent control of the foreground, edge and shadow planes. Effects include border 471, drop shadow 473, block shadow 471, soft shadow 475, emboss 473, bevel 471, glow 473 and perspective drop shadow 474. Up to 26 font and edge effect styles can be defined and recalled using the keyboard. A change made to an existing style will automatically update any text typed with that style, allowing global style changes to be applied to a job.

SEE ALSO

Edge Effects 470
User Defined Styles control tab 298

1.5.5.6   Logo fonts

Any font group can be edited, enabling custom character and logo mapping. Fonts can then be saved for use in text pages, lines and splines.

SEE ALSO

Logo Fonts (Logos) control tab 287

1.5.5.7 Logos

Any picture with an associated matte can be used as a logo within a text page and assigned to a key. Style and size changes can be applied instantly and there is no requirement to save the modified logo to disk.

SEE ALSO

Logos (Logos) control tab [289]
Logo Properties (Logo) control tab [288]

1.5.5.8 Page transitions

A wide selection of page transitions can be applied to pages including Wipe, Fade, Cut, Box In etc. Transition parameters can be configured on a per page basis.

SEE ALSO

Transition dialog tab [767]
Page transitional animation [440]
Transition toolbar [257]

1.5.5.9 Shapes

A selection of basic graphic shapes are available including rectangle [489], circle [486] and polygon [490]. These can be used in the construction of simple straps and background designs.

NOTE

Enhanced shapes [23] are available with certain product derivatives.

SEE ALSO

Shapes and cutouts [485]
Shape toolbox [319]
Graphics>Shapes [395]

1.5.5.10 Spell checker

Text pages can be checked for spelling against a dictionary and words corrected automatically under user control.

SEE ALSO

Spelling [546]
Importing new words into a dictionary [546]
Checking text [546]
Edit> [384] Spell Check [387]

1.5.5.11 Standard moves

Animation markers can be applied to numerous graphic element types. A basic set of real time animation types are supplied by default (Standard Moves). These include Flash, Type and Wipe. These can be supplemented by the Cool Move [20], Smart Move [32] and Custom Animation [20] options if your software derivative is upgraded.

SEE ALSO

Standard Moves [534]
Animation Marker dialog box [565]
Text>Markers>Insert> [408] Animation [41]

1.5.5.12 Templates (Field markers)

A text page can be created with pre-defined field styles and field positions for subsequent completion by an operator.

SEE ALSO

Field Settings control tab ⌐283⌐
Field Data Connection Settings (Data) control tab ⌐281⌐
User Defined Styles (Styles) control tab ⌐296⌐

1.5.5.13 Text import

Any text, prepared using a word processor or similar software, can be pasted into a text page for subsequent editing and style definition. ASCII text can also be imported directly into a text page.

SEE ALSO

Text> ⌐408⌐ASCII Import ⌐418⌐
ASCII Import dialog box ⌐585⌐
ASCII Import ⌐539⌐

1.5.5.14 Text line

Enables text to be constructed and style changes applied instantly. Size and screen position can be changed in real-time using the mouse.

SEE ALSO

Available text objects ⌐542⌐
Text Line ⌐410⌐
Text Line/Clock control set ⌐312⌐

1.5.5.15 Text page

Enables text creation with similar editing capabilities to leading word processor software, including cut and paste, justification and automatic word wrap. Dedicated keyboard keys are provided for most editing functions including kerning, style, case change and size.

SEE ALSO

Available text objects ⌐542⌐
Text> ⌐408⌐Text Page ⌐410⌐
Text Page control set ⌐313⌐

1.5.5.16 Text tabulation and margins

Up to 8 tabs can be defined for each text page with left, right, centre or decimal justification. Left and right margins default to the safe title area can be changed if required.

SEE ALSO

Text> ⌐408⌐Format Tabs ⌐416⌐
Text> ⌐408⌐Text Margins ⌐416⌐
Edit Tabs dialog box ⌐627⌐
Edit Text Margins dialog box ⌐628⌐
Margin markers ⌐261⌐
Tab markers ⌐261⌐

1.5.5.17   Transparency and shading

The foreground, edge and shadow planes can be colour shaded independently with lighting effects, graduated transparency and texture/texture map fill.

SEE ALSO

Transparency (Trans.) control tab 295ꀸ
Colour control tab 277ꀸ

1.5.5.18   Unlimited foreground layers, zooming, grids, safe areas and undo/redo

Any foreground layer can be selected and changed at any time, even if subsequent layers lie on top. Layers can be grouped together to enable global changes, re-ordered into a new priority sequence or collapsed onto the background layer. The zoom facility enables any section of the foreground and background to be enlarged for detail work. Recent changes made to the background and foreground layers can be reversed using undo and redo. User definable safe area and title grids can be displayed at any time to guide text and graphic placement.

SEE ALSO

Graphic Tools 266ꀸ
Toolbar 315ꀸ
Zoom toolbox 321ꀸ
Edit> 384ꀸUndo 385ꀸ
Edit> 384ꀸRedo 385ꀸ
Safe Area control tab 292ꀸ
Configuring and displaying safe areas 263ꀸ
Key and Grid Settings control tab 285ꀸ
Configuring and displaying grids 262ꀸ

1.5.5.19   Variable speed rolls and crawls

Page foregrounds can be programmed to roll, crawl or croll. Text page markers can define the dynamics of a foreground roll, crawl or croll. Controls include speed change, accelerate, decelerate and pause. Page markers can be self timed or triggered from the keyboard or GPI.

SEE ALSO

Motion markers 514ꀸ
Page foreground animation 440ꀸ
Foreground dialog tab 760ꀸ

1.5.6   Optional licensed features and other product options available for one or more products or derivatives

The following sections detail the available licensed features AND other product options that may available as standard or as an option for one or more products or product derivatives. Please also refer to the Clarity product brochure for the latest options available for your system unit. Contact Pixel Power sales or support 103ꀸ for more advice on available options and pricing.

Features that are licensed 114ꀸ (i.e controlled by the DK2 licence dongle, licence dongle code and that appear in the Supported Features dialog box 806ꀸ) are annotated by the [LICENSED] label in the section heading. The software features applicable to the current licence dongle can be displayed using the Licence> 435ꀸShow Features 436ꀸ menu command. The Supported Features dialog box 806ꀸ is displayed. New or edited sections since the last release are highlighted with dark grey shading. The following features are available and can be listed in the Supported Features dialog box 806ꀸ.

Derivative

Entry	More information
TG Text Generator	See Software Derivatives 8ꀸ and TG 9ꀸ.
CG Character Generator	See Software Derivatives 8ꀸ and CG 9ꀸ.

GX Graphics Workstation	See Software Derivatives [8] and GX [9].

Enabled features

Entry	Description	More information
3D Mapped Cel Playback	Enables a Clarity system unit to playout 3D mapped cel animations created from .RPF files using the Autodesk® 3ds Max® software.	3D mapped cel playback [15]
Audio Clips & Embedding	Enables a Clarity system unit to record audio from a number of sources including embedded audio and playback audio clips from disk; also includes de-embed, group mix and re-embed capability.	Audio clips & embedding [16]
Automation Interface	XML and RS232 legacy automation interface, enabling Clarity system unit to be controlled by supported automation systems.	Automation interface [17]
Custom Animations	Enables custom animations to be created interactively using key frames and by the manipulation of spline paths within the Graphic Edit window [260].	Custom Animations [20]
Digital Auxiliary Output	Adds support for SDI video and key output for preview. May require a hardware upgrade.	Digital auxiliary output [21]
Film Resolution Output	Enables Clarity system units that support HD or Clarity PREP to create custom high resolution video formats.	Film resolution output [24]
High Definition	System operating in HD output mode.	This entry is dictated by your system unit model and available SD/HD hardware.
Live Push Back	Enables a Clarity system unit to display fully filtered resized incoming live video with other foreground/background components, and to smoothly vary the image between full-screen and the required position/size.	Live push back 2D DVE [25]
Preview Channel Playout	Creates quad channel [27] system (enables the playout of CG content on preview outputs) or a dual channel [27] system on Clarity systems featuring the Digital auxiliary output [21] option (enables the playout of CG content on the additional auxiliary channel).	Preview channel playout [27]
MXF Plugin	Enables the export of .PPV video and .PPA audio files to MXF format. Also enables enhanced import of MXF files that can be converted to Pixel Power's propriety .PPV and .PPA video and audio files for subsequent use with the CG Tools software and internal/external clip stores. Functionality is provided as a standalone component installation. Also used by the Pixel Power MediaShop file converter [44].	MXF Plugin [LICENSED] [26]
Single Channel	System unit only features a single hardware channel.	Only shown if your system features a single hardware channel. You can optionally limit multiple channel system units to only operate with a single channel. This feature is a no-cost option and requires a new licence dongle code. Contact Pixel Power support for more information.
Standard Definition	System operating in SD output mode.	This entry is dictated by your system unit model and available SD/HD hardware.

Entry	Description	More information
Stills Store	Comprehensive features include polyphoto library browse, picture stacks, page transitions (including page turns and box wipes) and A/B cut.	Stills Store [32]
Timecode Reader	Enables LTC and VITC timecode to be interpreted from the available audio connectors of a Clarity system unit rear panel. May require a hardware upgrade.	Timecode Reader [33]
Video Clips	Enables a Clarity system unit to record SDI video to disk and playback video clips from disk. May require a hardware upgrade and/or optional disk storage [21].	Video clips [34]
VTR Control	Enables you to control and/or grab/record video from a connected VTR via the RS422 ports and also the associated digital video connectors on the rear panel of the selected Clarity system unit. Also enables rotoscoping in conjunction with the Ramcorder [29].	VTR Control [35]

SEE ALSO

Software licensing [114]

1.5.6.1 3D mapped cel playback [LICENSED] [CLARITY]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on GX derivatives and optional on TG and CG derivatives								Not Dependant		OPT	OPT	■
#		PP8259	PP8259	PP8259	PP8259	PP8259							

Description

Enables 3D mapped cel animations to be played out.

SEE ALSO

Live surface animations using Autodesk® 3ds Max® .RPF files [509]
3D mapped cel playback [LICENSED] [CLARITY] [15]
Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab [272]
Optional licensed features and other product options available for one or more products or derivatives [13]
Autodesk® 3ds Max® software for 3D object creation [16]
http://www4.discreet.com/3dsmax/

1.5.6.2 Additional offline preparation software licence

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
							OPT		Not Dependant			OPT	OPT
#												PP8437 PP8438	PP8439 PP8440

Description

Additional licences to run the Clarity PREP job preparation software. New physical licence dongle and license keys supplied. Licence can either be a fixed licence (PP8437 and PP8439) or a floating licence (PP8438 or PP840).

SEE ALSO

Optional licensed features and other product options available for one or more products or derivatives 13

1.5.6.3 Audio clips & embedding [LICENSED] [CLARITY]

Audio may be recorded in real-time via AES/EBU or embedded inputs, or imported as .WAV files. Clarity also has the ability to mix incoming and internally stored audio, including a ducking capability that is ideal for master control and promotion applications. A unique voice-over record function allows a voice talent to read-to-picture, loading new narration clips in real-time as the CG pages play out, with convenient cue, record and review tools.

Audio option (includes de-embed, group mix, clip playback and re-embed capability) 16
Dual channel audio option (includes de-embed, group mix, clip playback and re-embed capability) 16

SEE ALSO

Optional licensed features and other product options available for one or more products or derivatives 13

1.5.6.3.1 Audio option (includes de-embed, group mix, clip playback and re-embed capability)

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT		OPT	OPT			OPT	OPT	Not Dependant		
#		PP8433	PP8433		PP8504	PP8468							

1.5.6.3.2 Dual channel audio option (includes de-embed, group mix, clip playback and re-embed capability)

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
				OPT					OPT	OPT	Not Dependant		
#				PP8336									

1.5.6.4 Autodesk® 3ds Max® software for 3D object creation

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		Available for use only with GX derivatives							Not Dependant				OPT
#		PP8230	PP8230	PP8230	PP8230	PP8230							

Description

Clarity can play out complex 3D/2D animations (see <u>3D mapped cel playback</u> [15]) that combine the power and flexibility of dedicated 3D modelling software with the convenience of real-time character and animation rendering, using content provided in real-time e.g by controlling automation systems. Animations or static objects are pre-rendered using Autodesk® 3ds Max®, and compiled into Clarity cels (.CEL file format). When these cels are played out, Clarity can project its own graphic objects (such as text and/or animations) in real-time onto the surfaces of the pre-rendered 3D objects. If the Clarity projected graphic objects are themselves animated (e.g. Cool Moves and Smart Moves), then this movement will also be projected onto the 3D object surfaces.

SEE ALSO

<u>Live surface animations using Autodesk® 3ds Max® .RPF files</u> [509]
<u>Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab</u> [272]
http://www4.discreet.com/3dsmax/

1.5.6.5   Automation interface [LICENSED] [CLARITY]

Serial (RS232)

Chyron Remote Control Server converts Chyron Infinite remote control protocol commands supplied via a serial communications port into Clarity DCOM network control calls, enabling control of Clarity from newsroom systems that support the Chyron Infinite remote control protocol.

XML

Extensible Markup Language (XML) is a simple, very flexible text format derived from SGML (ISO 8879). Originally designed to meet the challenges of large-scale electronic publishing, XML is also playing an increasingly important role in the exchange of a wide variety of data on the internet and elsewhere. XML based remote control provides a convenient mechanism for custom automation while compatibility with the legacy Intelligent Interface Protocol ensures that Clarity can interface with a diverse range of automation systems.

<u>SD Automation interface</u> [17]
<u>SD/HD Automation interface</u> [17]

SEE ALSO

<u>Optional licensed features and other product options available for one or more products or derivatives</u> [13]

1.5.6.5.1   SD Automation interface

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on CG and GX derivatives and optional on TG derivatives								✓		OPT	▪	▪
#	PP8232	PP8232	PP8232	PP8232									

1.5.6.5.2   SD/HD Automation interface

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
					▪ (CG, GX)	▪ (CG, GX)			✓	✓	OPT	▪	▪

Current Product					Output	Derivatives
#				PP8467	PP8467						

1.5.6.6 Breakout cable assembly (Audio/GPI/GPO/LTC/Tally/RS232/RS422) [CLARITY]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
OPT	OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		
#	PP8449	PP8449	PP8449	PP8473	PP8515	PP8514						

Description

Due to rear panel space limitations, Clarity 100, 200, 300, 3000 and 5000 systems employ a multi-pin female HD D-type socket on their respective rear panels to enable the following signal distribution:

Signals	Clarity					
	100 (44-pin)	200 (44-pin)	300 (44-pin)	3000 (62-pin)	500 (15-pin)	5000 (44-pin)
GPI/O	■	■	■	■		■
Digital audio	■	■	■	■	■	■
Analogue audio	■	■	■	■		
Watchdog tally				■		■
Bypass tally	■	■	■	■		■
LTC	■	■	■	■	■	■
RS232	■	■	■	■		
RS422	■	■	■	■		

A specialised multi-function cable can be purchased OR created to distribute and receive signals to respective external devices and peripherals. Information regarding the pinout mapping is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity and Clarity PREP PC Installation

1.5.6.7 Cel animation creation

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

A sequence of pictures or part pictures can be compiled into a flipbook cel animation file. Compiled cel animation files can be pasted into the foreground layer to create animation effects within a page. Applications include animated weather symbols, revolving globes and animated icons.

1.5.6.8   Clocks

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			▪	▪

Description

Any text style can be used to create a digital clock with hours, minutes, seconds and tenths displayed in real-time. Any text style can be used to create a date clock with day, date, month and year displayed either as numerals or text. The time can be supplied from the PC internal clock, the video reference signal or an external RS232 computer feed.

1.5.6.9   Contour ShuttlePRO version 2 multimedia controller

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT	Not Dependant		Not Dependant		
#	PP8114	PP8114	PP8114	PP8114	PP8114	PP8114	PP8114	PP8114					

Description

Now supported by version 7 of the CG Tools software, the ShuttlePRO version 2 is a powerful productivity enhancement tool for all CG Tools software derivatives, especially Clarity.

Designed for ergonomic integrity and maximizing productivity, allowing one-hand access to the fully programmable buttons and jog/shuttle knob. Nine (9) of the buttons have removable keycaps for easy labeling and referencing.

The inner ring or 'jog' rotates through 360 degrees and provides precision frame by frame control. The outer black ring or 'shuttle' is rubberized and spring-loaded. It facilitates fast forward and rewind. Specific areas of CG Tools functionality where the ShuttlePRO can be utilised include:

- VTR control;
- VTR control, clip recording and playback;
- timeline control;
- browsing file lists within Clarity Explorer.

Contour ShuttlePRO version 2 multimedia controller support [455]
http://www.contourdesign.com/shuttlepro/

1.5.6.10   Cool Moves

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

Sophisticated real-time animation effects for text and logos including Explode, Spiral, Bounce, and Plughole. The effects can be customised using simple controls to produce a wide variety of text moves. Multiple effects can be active at the same time, triggering at preset times or under the control of a trigger key. Additionally, a number of the Cool Move effects incorporate an 'A to B' facility enabling the start and end points of the animation to be defined.

Cool Moves include Continuous Tickers [20] that were previously available separately.

Cool Moves [462]
Animation Marker dialog box [565]
Text>Markers>Insert> [408] Animation [41]

1.5.6.10.1   Continuous Tickers

Featured as part of the Cool Moves [20] animation option

Continuous ticker capability makes easy work of business graphics by providing multiple crawls in a single channel. Text used by the continuous ticker animation effect can be supplied remotely and updated whilst the animation effect is playing out online. This is useful for creating stock tickers etc. where information is required to be updated rapidly without going offline.

Cool Moves [462]
Animation Marker dialog box [565]

1.5.6.11   Custom Animations [LICENSED]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on GX derivatives and optional on CG derivatives (not available with TG derivatives).								Not Dependant			OPT	■
#	PP8513	PP8513	PP8513	PP8513	PP8513	PP8513	PP8513	PP8513					

Description

Using the Timeline control box, custom animations can be created interactively using key frames and by the manipulation of spline paths within the Graphic Edit window [260]. Custom animations can then be saved for future use in other jobs.

1.5.6.12   Digital auxiliary output [LICENSED] [CLARITY] [RETROFIT]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT						✓		Not Dependant		
#		PP8436	PP8436										

Description

Adds SDI video and key output for preview, second HD15 connector for analog monitor output with RGB/YUV/Composite/YC and external SCSI connector for clip storage expansion.

NOTE

Must purchase Video clips ⌐34¬ option to enable clips.

1.5.6.13   Disk storage for video/audio clip player [CLARITY] [RETROFIT]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		
#		PP8263 PP8397 PP8398 PP8399 PP8434 PP8435 PP8453 PP8455	PP8263 PP8397 PP8398 PP8399 PP8434 PP8435 PP8453	PP8263 PP8397 PP8398 PP8399 PP8400 PP8401 PP8454	PP8263 PP8397 PP8398 PP8399 PP8434 PP8435 PP8453	PP8263 PP8397 PP8398 PP8399 PP8400 PP8401 PP8454							

Description

Provides a dual channel, uncompressed video AND audio disk recorder. Storage may be supplied by Pixel Power Ltd. or sourced from approved third party manufacturers. Provides a minimum of 60 minutes of 4:2:2 storage, easily expandable via an external SCSI array. While the internal disk array is RAID 0, clip storage provided externally may be RAID 0 or RAID 5 for superior reliability.

If you require ONLY audio clip storage, see Disk storage for audio clip player [CLARITY] [RETROFIT]. ⌐22¬

Chaparral 2RU external storage

The optional external clip storage solutions are packaged in just 2U of 19" rack space. They offer support for Ultra 320 SCSI RAID levels 0 and 5, depending on model. All models feature dual redundant power supplies and all rack modules (PSU's, hard disks etc.) are hot-swappable, meaning that they can removed and replaced whilst the system is

running.

PART	Description
PP8263	Chaparral 2RU External Storage 144Gb with dual redundant power supplies.
PP8397	Chaparral 2RU External Storage 288Gb with dual redundant power supplies.
PP8398	Chaparral 2RU External Storage 144Gb RAID 5 with hot spare and dual redundant power supplies.
PP8399	Chaparral 2RU External Storage 288Gb RAID 5 with hot spare and dual redundant power supplies.

Internal chassis storage

The optional internal clip storage solutions comprise up to six hard 3.5" disks (depending on option) striped to act as a single striped volume set with RAID 0 compliance. When clips are written to the striped volume set, data is split equally over the array. All drives are hot-swappable, meaning that they can removed and replaced whilst the system is running.

PART	Description	Specification	New systems	Retrofit
PP8400	Internal clip storage 144Gb	4 x 36Gb 15K rpm drives	■	
PP8401	Internal clip storage 288Gb	4 x 72Gb 15K rpm drives	■	
PP8434	Internal clip storage 72Gb	2 x 36Gb 15K rpm drives	■	■
PP8435	Internal clip storage 144Gb	2 x 72Gb 15K rpm drives	■	■
PP8453	Internal clip storage 288Gb	2 x 144Gb 15K rpm drives	■	■
PP8454	Internal clip storage 576Gb	4 x 144Gb 15K rpm drives	■	■
PP8455	Internal clip storage 864Gb	6 x 144Gb 15K rpm drives	■	■

Information regarding the use of disk storage is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity Clip Storage and Management

1.5.6.14 Disk storage for audio clip player (Internal) [CLARITY] [RETROFIT]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
									Not Dependant		Not Dependant		
#		PP8412 PP8413	PP8412 PP8413	PP8412 PP8413	PP8412 PP8413	PP8412 PP8413							

Description

Internal chassis storage

Provides a single channel, uncompressed audio disk recorder. Uses a single internal drive bay; remaining drive bays are blanked or use empty drive carriers. This option is only relevant if you are NOT purchasing video AND audio clip storage [21].

PART	Description	Specification	New systems	Retrofit
PP8412	Internal audio clip storage 36Gb	1 x 36Gb 15K rpm drive	■	
PP8413	Internal audio clip storage 72Gb	1 x 72Gb 15K rpm drive	■	

Information regarding the use of disk storage is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity Clip Storage and Management

1.5.6.15 Enhanced shapes

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

A selection of more enhanced graphic shapes (over Shapes [11]) are available e.g. spline [490], star [492], arc [486] and regular polygon [489]. These can be used in the construction of straps and background designs.

SEE ALSO

Shapes and cutouts [485]
Shape toolbox [319]
Graphics>Shapes> [395] Spline [402]
Graphics>Shapes> [395] Star [401]
Graphics>Shapes> [395] Arc [403]
Graphics>Shapes> [395] Regular Polygon [402]

1.5.6.16 External Easy Reader 2 LTC/VITC timecode reader [CLARITY]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		
#		PP8112	PP8112	PP8112	PP8112	PP8112							

Description

The External Easy Reader 2 LTC/VITC timecode reader enables subtitling and timeline controlled jobs to be played out under the control of the LTC or VITC output of a VTR, rather than requiring an edit controller. The LTC and VITC reader device supported is produced by Telecom Research. In use, Easy Reader 2 simply plugs in between the LTC or VITC output of the VTR or edit controller and an available RS422 serial port.

SEE ALSO

Timecode/VTR dialog tab [732]

1.5.6.17 Film resolution output [LICENSED]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
					OPT	OPT	OPT			✓	Not Dependant		
#					PP8254	PP8254	PP8254						

Description

Enables Clarity system units that support HD or Clarity PREP to create custom high resolution video formats, thus enabling high resolution images to be played out.

SEE ALSO

Optional licensed features and other product options available for one or more products or derivatives 13
Edit Video Format dialog box 629
Page Formats dialog tab 667

1.5.6.18 Freehand painting

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on GX derivatives (not available with TG or CG derivatives).								Not Dependant				▪

Description

A wide selection of brushes are provided for unlimited creative freedom. Brush types available include airbrush, texture, copy, move, flood fill, smudge, blur, eraser, user defined and single pixel retouch. The brush can be further modified by size, shape, transparency, profile and colour controls.

SEE ALSO

Paint Settings control tab 290
Background> 419 Paint 421

1.5.6.19 Graphics tablets

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	OPT	OPT	OPT	OPT	OPT	OPT	OPT	Not Dependant		Not Dependant		
#	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105	PP8104 PP8105					

PART	Description
PP8104	A5 Graphics tablet (Wacom PTZ-630G-EN) with cordless pen 25
PP8105	A3 Graphics tablet (Wacom XD1218) with cordless pen 25

1.5.6.19.1   A3 Graphics tablet (Wacom XD1218) with cordless pen

A high-performance, large-format tablet with a very large active area 300 x 450 mm (12" x 18"). Includes a programmable menu strip for your favourite keyboard shortcuts, a transparent overlay for tracing artwork and QuickPoint area for fast navigation. Design, draw and retouch with the pressure sensitive Grip Pen as intuitively as you would with a conventional pen. Navigate simply and with pixel-precision within your application and reduce the risk of RSI through its ergonomic design and perfect balance.

1.5.6.19.2   A5 Graphics tablet (Wacom PTZ-630G-EN) with cordless pen

Standard A5 sized graphics tablet (6" x 8") for painting within the Clarity, Clarity PREP and Clarity Plugin software. Design, draw and retouch with the pressure sensitive Grip Pen as intuitively as you would with a conventional pen. Navigate simply and with pixel-precision within your applications and reduce the risk of RSI through its ergonomic design and perfect balance.

1.5.6.20   Live push back 2D DVE [LICENSED] [CLARITY]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on CG and GX derivatives and optional on TG derivatives.								✓	✓	OPT	■	■
#	PP8258	PP8258	PP8258	PP8258	PP8469	PP8469							

Description

Live push back (Squeezeback or 2D DVE) enables a Clarity system unit to display fully filtered resized incoming live video at SD or HD (PP8469; Clarity 3000/5000 only) resolution with other foreground/background components, and to smoothly vary the image between full-screen and the required position/size, to enable the display of captions and rolls/crawls in a separate area alongside the program picture.

SEE ALSO

1.5.6.21   Mattes

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

Any drawing tool can be used to create a matte for subsequent cut and paste or background masking. There is also a selection of automatic matte creation tools including flood fill, chroma key, luma key and hue key.

SEE ALSO

1.5.6.22 MXF Plugin [LICENSED]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	OPT	OPT	OPT	OPT	OPT	OPT		Not Dependant		Not Dependant		
#	PP8509	PP8509	PP8509	PP8509	PP8509	PP8509	PP8509						

Description

Enables the export of .PPV video and .PPA audio files to MXF format. Also enables enhanced import of MXF files that can be converted to Pixel Power's propriety .PPV and .PPA video and audio files for subsequent use with the CG Tools software and internal/external clip stores. Functionality is provided as a standalone component installation. Also used by the Pixel Power MediaShop file converter 44.

Encoding and decoding of MPEG-2 Type D-10 for MXF is achieved using the MainConcept MPEG2 codec. See MXF MPEG Codec 26.

The MOG Solutions MXF ComponentSuite is implemented to fulfill the requirement for MXF import/export.

NOTE

This option is only available in conjunction with the Video clips 34 option.

SEE ALSO

1.5.6.22.1 MXF MPEG Codec

Featured as part of the MXF Plugin [LICENSED] 26 option.

Signifies the presence of the third-party codec (MainConcept) used by the CG Tools software for the encoding and decoding of MPEG-2 Type D-10.

1.5.6.23 Picture cut and paste

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			▪	▪

Description

Pictures or part pictures can be cut from the background layer or stills library, instantly resized and pasted over a new background with a range of edge effects. If a matte is present this can be used to cut an irregular area or colour fill a shape. Paste and crop styles allow predefined destination windows for rapid picture placement in live applications.

1.5.6.24 Preview channel playout [LICENSED] [CLARITY]

Additional output channels can be added to a Clarity system. Creates a quad channel 27 system (enables the playout of CG content on preview outputs) or a dual channel 27 system on Clarity systems featuring the Digital auxiliary output 21 option (enables the playout of CG content on the additional auxiliary channel).

Additional two output channels 27
Additional output channel [CCIR-601 SD] 27
Additional output channel [SMPTE 292M HD] 28

1.5.6.24.1 Additional two output channels

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
				OPT (SD)		OPT (SD/HD)			Specific to native format on system		Not Dependant		
#				PP8391		PP8391							

Description

If applicable to your Clarity hardware configuration, additional channels can be added to your existing product. Creates a quad channel system using preview outputs.

NOTE

Live input and clips not supported on these additional channels.

1.5.6.24.2 Additional output channel [CCIR-601 SD]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT						✓		Not Dependant		
#		PP8432	PP8432										

Description

If applicable to your Clarity hardware configuration, an additional SD channel can be added to your existing product. Creates a dual channel system using the auxiliary output.

NOTE

Requires Digital auxiliary output [21] option. Live input and clips not supported on the additional channel.

1.5.6.24.3   Additional output channel [SMPTE 292M HD]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
					OPT	OPT				✓	Not Dependant		
#					PP8432	PP8432							

Description

If applicable to your Clarity hardware configuration, an additional HD channel can be added to your existing product.

NOTE

Live input and clips not supported on the additional channel.

1.5.6.25   PS/2 keyboard and mouse extender

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
									Not Dependant		Not Dependant		
#	PP8099 PP8100	PP8099 PP8100	PP8099 PP8100	PP8099 PP8100	PP8099 PP8100	PP8099 PP8100							

Description

Enables PS/2 keyboard/mouse and SVGA monitor to be connected up to 200m away from the Clarity system unit using low cost CAT5/5e/6 cable. Features include:

- high resolution video quality;
- password security;
- all metal construction;
- power and activity indicators;
- standalone or 19" rackmountable (using optional kit) ;
- compact design;
- 3 Year Warranty.

SEE ALSO

Keyboard/mouse/tablet extenders [209]

1.5.6.26   Replacement mouse

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		

	Current Product						Output	Derivatives
#	PP8103	PP8103	PP8103	PP8103	PP8103	PP8103		

Description

Replacement optical wheel mouse.

1.5.6.27 Ramcorder (for rotoscoping purposes)

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on GX derivatives (not available with TG or CG derivatives).								Not Dependant				■

Description

The Ramcorder is a frame buffer that enables the viewing, manipulation and playout of a series of video frames. It is able to cope with video clips containing a number of frames limited only by the size of the allocated disk cache, but at any one moment only a certain number will be available for manipulation/playout. The Ramcorder can be used as additional temporary picture and matte storage or for rotoscoping and animation work.

SEE ALSO

Ramcorder control box [35]

1.5.6.28 RapidAction keyboard

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	■	■	■	■	■	OPT	OPT	Not Dependant		Not Dependant		
#	PP8097						PP8097	PP8097					

Description

The Version 2 RapidAction keyboard is currently supplied as standard with 5U Clarity systems and Clarity 200 and 300 systems (optional for Clarity 100 and offline software derivatives e.g. Clarity PREP). It provides a larger number of dedicated keys (40) compared to the previous Version 1 RapidAction keyboard. The Version 2 RapidAction keyboard also features some illuminated keys to help inform the operator of the current state of the system, software and playout status.

SEE ALSO

Version 1 RapidAction keyboard [179]
Version 2 RapidAction keyboard [183]

1.5.6.29 RapidRecall keypad

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
									Not Dependant		Not Dependant		
#	PP8111 PP8257	PP8111 PP8257	PP8111 PP8257	PP8111 PP8257	PP8111 PP8257	PP8111 PP8257							

PART	Description
PP8111	Version 2 RapidRecall Keypad (Ethernet interface, for Clarity) [21]
PP8257	RapidRecall Keypad (RS232 interface, for Collage, Collage 2, Graphite 2 or Clarity)

Description

The playout version of the RapidRecall Keypad is optimized for master control and live applications where space is at a premium. The keypad gives quick recall of stills, clips and character generator pages from within a prepared job. The 4 line fluorescent display gives operator confidence in what is prepared for air. The still store version gives optimal control of stills. It provides dedicated buttons for controlling image capture, applying transitions, manipulating stacks and playing out from stack or by still number.

SEE ALSO

Keypads [21]

1.5.6.30 Record output to clip [CLARITY]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	Available as standard on GX derivatives (not available with TG or CG derivatives).								Not Dependant				■

Description

CG content can be recorded to a clip on an internal or external clip volume. The host system must have the following options:

Video clips [LICENSED] [CLARITY] [RETROFIT] [34]
Disk storage for video/audio clip player [CLARITY] [RETROFIT] [21]

SEE ALSO

Playout File Output control box [34]

1. Welcome
About current CG Tools products

1.5.6.31 Redundant power supply [CLARITY] [RETROFIT]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT							Not Dependant		Not Dependant		
#		PP8431											

Description

The dual redundant power supply provides improved reliability. The PSU features dual redundancy in both the mains supply and the PSU modules. In the event that one mains supply fails, one PSU module fails or both, the Clarity system unit will keep operating.

Information regarding power supplies is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity Power Supply Units (PSU)

NOTE

All Clarity systems except Clarity 100 can be fitted with redundant power supplies at time of order. Please contact Pixel Power Sales or Technical Support for more information on the options available.

1.5.6.32 Slide runner kit [CLARITY] [RETROFIT]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
	OPT	OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		
#	PP8118	PP8118	PP8118	PP8118	PP8118	PP8118							

Description

Slide runner kit for Clarity systems.

Information regarding the installation of Clarity system units is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity and Clarity PREP PC Installation

NOTE

You must specify the Clarity model to enable the correct kit to be ordered for your system.

1.5.6.33 Smart Moves

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

Smart Moves are additional character and logo animation effects incorporating automatic pre-rendering to achieve an even wider range of easy to use animation effects including Zoom, Spin, Focus and Perspective. Additionally a number of Smart Move effects incorporate an 'A to B' facility enabling the start and end points of the animation to be defined.

SEE ALSO

Smart Moves [532]
Animation Marker dialog box [565]
Text>Markers>Insert> [408] Animation [411]

1.5.6.34 Software playout

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

CG content created using any product or derivative can be output on the software playout channel (UI). Products that do not feature hardware (Clarity PREP) will only have the UI channel available on which to playout CG content.

SEE ALSO

Playout Controls control box [343]
Playout File Output control box [347]

1.5.6.35 Stills store [LICENSED]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			■	■

Description

Comprehensive features include polyphoto library browse, picture stacks, page transitions (including page turns and box wipes) and A/B cut. Background images can be placed into order prior to going on-air and then re-ordered live if necessary. An optional keypad [30] is available for simplified control of on-air playout.

SEE ALSO

1.5.6.36   Subtitling with timecode follow and RS422 timeline control

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			▪	▪

Description

Enables Clarity to read and transfer EBU subtitle files to a text page along with the respective timecode. Transparent background strap and text styles can be selected from the full range of effects. The playout of the subtitles is conducted either under timeline control from an edit controller or from an LTC or VITC data stream. The playout of jobs can be controlled by an edit controller or other RS422 based device such as a LTC/VITC timecode reader or generator. Again, these devices are connected via the RS422 ports available on the rear panel of the selected Clarity system unit. It is possible to assign a unique timecode to a page so that each page can be located and played out from an edit controller without the need to operate the keyboard. Clarity emulates the standard Sony 9-pin protocol language for VTR control.

SEE ALSO

1.5.6.37   Text spline (Text on a curve)

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			▪	▪

Description

Text can be typed around a circle, ellipse or any other curve and then edited in the same way as for a text line. The shape of the curve can be adjusted interactively, with the text 'flowing' automatically around the curve.

SEE ALSO

1.5.6.38   Timecode reader [LICENSED] [CLARITY]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
OPT	OPT	OPT	OPT	OPT	OPT			Not Dependant		Not Dependant		

	Current Product						Output	Derivatives
#	PP8338	PP8338	PP8338	PP8338	PP8338	PP8338		

Description

Enables LTC and VITC timecode to be interpreted from available audio (LTC) and video/key (VITC) connectors on a Clarity system unit rear panel.

- LTC is read using hardware and requires hardware upgrade for Clarity 500 in the form of the H091 PCB if the option was not specified at time of purchase. No hardware upgrade is required for Clarity 100, 200, 300, 3000 and 5000 as the hardware is already on board and is enabled via just software licensing. LTC can be read from available audio inputs on Clarity systems.
- VITC is read using software decoders and requires no hardware upgrade. VITC can be read from an available video/key input pair.

SEE ALSO

Optional licensed features and other product options available for one or more products or derivatives [13]

1.5.6.39　Video clips [LICENSED] [CLARITY] [RETROFIT]

Available as standard (■) or marked as optional (OPT) in the following products and software derivatives:

	Current Product								Output		Derivatives		
	Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
		OPT	OPT	OPT	OPT	OPT	OPT		Not Dependant		Not Dependant		
#		PP8436	PP8436	PP8261	PP8503	PP8466	PP8261						

Description

Video sources may be captured in uncompressed 4:2:2 or 4:2:2:4 formats ensuring the highest image quality. Clips may also be assembled from image sequences providing a direct link between Clarity and offline animation systems. Clips functions are tightly integrated. Any page may use a clip background with user defined head, tail, loop, pause and timing settings. The systems' internal live push back [25] (squeezeback) function can also be used to resize and reposition clip playback in real-time. The full suite of Clarity text and cel animation tools can be combined with clips to create complex layered presentations for maximum impact.

PART	Description
PP8436	Video clip/auxiliary output option excluding storage; adds SDI video and key output for preview, second HD15 connector for analog monitor output with RGB/YUV/Composite/YC and external SCSI connector for clip storage expansion.
PP8261	Video Clip option retrofit (not including external storage, must purchase separately).
PP8466	Video Clip option (not including storage, must purchase separately).
PP8503	Video Clip option (not including storage, must purchase separately).

NOTE

DOES NOT INCLUDE CLIPS STORAGE (see Disk storage for video clip player [21])

SEE ALSO

Optional licensed features and other product options available for one or more products or derivatives [13]
Video clips [497]
Graphics>Cels/ Video> [395] Create Video Clip [404]
Graphics>Cels/ Video> [395] Paste Clip [405]

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　　　34

Copyright © 2000-2006 Pixel Power Ltd.

1.5.6.40 Video grab with key

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on CG and GX derivatives (not available with TG derivatives).								Not Dependant			▪	▪

Description

Stills and mattes can be captured from the asynchronous live video input.

SEE ALSO

Background> 419 Grab Video Frame 420
Grab Video dialog box 669

1.5.6.41 VTR control [LICENSED] [CLARITY]

Available as standard (▪) or marked as optional (OPT) in the following products and software derivatives:

Current Product								Output		Derivatives		
Clarity 100	Clarity 200	Clarity 300	Clarity 500	Clarity 3000	Clarity 5000	Clarity PREP	Clarity Plugin	SD	HD	TG	CG	GX
Available as standard on GX derivatives and optional on CG derivatives (not available with TG derivatives).								Not Dependant			OPT	▪
#	PP8512	PP8512	PP8512	PP8512	PP8512	PP8512						

Description

Enables you to control and/or grab/record video from a connected VTR via the RS422 ports and also the associated digital video connectors on the rear panel of the selected Clarity system unit. Also enables rotoscoping in conjunction with the Ramcorder 29 .

SEE ALSO

Timecode/VTR dialog tab 732
VTR Control Dialog 359

Section 2
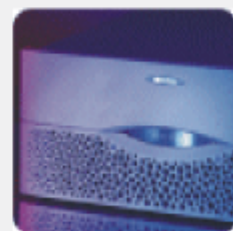
What's new?

2. What's new?

2.1 Supporting applications and tools

2.1.1 What's new in supporting applications and tools from 07/06/2006 to 10/10/2006

The table below describes the main new features available.

Release	Brief description of new features
07/06/06 to 10/10/2006	For a full description see New Features ⌐46⌐ 1. Implemented support for searching for templates by number. 2. Ability to search for templates using iNews resource info. 3. Implemented the ability to convert Clarity video clips from PAL to NTSC.

2.2 CG Tools

2.2.1 What's new in CG Tools versions 7.1.0.9 to 7.1.2.1

The table below describes the main new features available in versions 7.1.0.9 to 7.1.2.1 of the CG Tools software. To see new reference material that has been added to this version, see Updates to documentation not linked to current or previous releases ⌐77⌐. These are usually changes to the documentation that were not initiated by a bug report or feature request.

Release	Brief description of new features
7.1.0.9	For a full description see New Features> ⌐52⌐7.1.0.9 ⌐53⌐ 1. Implemented UpdateFields XML remote interface mechanism. 2. Implemented UpdateGlobalFields XML remote interface mechanism.
7.1.1.0	For a full description see New Features> ⌐52⌐7.1.1.0 ⌐53⌐ 1. Next Free key action now finds next free page after your current edited page. 2. Implemented the ability to turn off automatic reloading of jobs. 3. Implemented edge effects for Paste Live and Paste Clip objects. 4. Implemented Fade Cool Move animation effect. 5. Implemented separate on and off cushions for animations. 6. Implemented the ability to define animation time in minutes as well as seconds and frames. 7. Implemented limited off moves for the Continuous Ticker animation effect. 8. Implemented Start On Screen and End On Screen options for animations. 9. Implemented improvements to motion markers. 10. Field marker width editing now consistent with mask editing. 11. Implemented optional DSK bypass of black rather than live source. 12. Auto Select Online Cued Page option renamed. 13. Implemented the ability to set a preview frame for a job page. 14. Implemented visual warnings when a page is open for editing whilst a page containing triggers is online. 15. Full key now forced on page background images which contain no key information. 16. Lock Fields functionality now applies to all text layers on a page. 17. Increments now definable when manipulating text. 18. Sub-pixel increments now available when manipulating text. 19. Default system wide font and character height can now be specified. 20. Implemented the ability to set default values for animations. 21. Implemented the ability to export to the Apple QuickTime format. 22. Implemented the option to disable the use of filenames when exporting pages. 23. Embedded audio data status now selectable on a per-channel basis. 24. Implemented improvements to the Style Protect (Prot) control tab. 25. Implemented improvements to Style Copy functionality.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   38

Copyright © 2000-2006 Pixel Power Ltd.

2. What's new?

CG Tools

Release	Brief description of new features
7.1.1.1	For a full description see New Features> 52 7.1.1.1 58
	1. Implemented improvements to parameter updates when editing text page selections. 2. Obscuring squeezebacks now mute DSK background audio. 3. Implemented the ability to use the SHIFT or CTRL keys together with the F1-12 function keys to trigger animations. 4. Implemented a new type of Store Page action. 5. Implemented improvements to the re-draw speed of the Page List.
7.1.1.2	For a full description see New Features> 52 7.1.1.2 59
	1. Implemented improvements to font identification on the GUI when editing text pages. 2. Implemented Export Page and Export Pages tools. 3. Restructured CG Tools Help menu. 4. Implemented improved software start-up checking to distinguish between Clarity and Clarity Prep software derivatives. 5. Implemented the ability for motion markers to action on Continuous Ticker animations loops. 6. Implemented Start On Screen option for Continuous Ticker animations.
7.1.1.3	For a full description see New Features> 52 7.1.1.3 60
	1. Implemented fixed positioning for page template field markers. 2. Implemented changes to Apple QuickTime colour depth setting when exporting to .MOV files. 3. Implemented the ability for digital clocks to send triggers at defined points in time. 4. Digital clocks now feature separate start, stop, reset and lap triggers keys. 5. Implemented stop times for Stopwatch and Global Stopwatch digital clock types.
7.1.1.4	For a full description see New Features> 52 7.1.1.4 61
	1. Implemented improvements to style selection when overwriting and deleting text. 2. Implemented label for spline type. 3. Implemented label for shading type. 4. Renamed the User Defined Styles (Styles) control tab to (Crop Styles) when non-text based elements are selected. 5. Colour control tab is now selected automatically when the User Defined Styles (Styles) control tab, Logos control tab or Logo Fonts (Logos) control tab is floated. 6. Preview list on the User Defined Styles control tab now scrolls to make sure the selected style is visible. 7. Dialog boxes that feature file and folder navigation now each remember their own folder to further improve basic usability. 8. File menu re-organised to improve command accessibility. 9. Image previews in file based dialog boxes now appear correctly. 10. Dialog boxes now remember their size and position. 11. Pixel Power Job (.ppj) file extension is no longer shown within the Save Clarity Job dialog box. 12. Implemented the ability to update field data in place. 13. Implemented the ability to change the contents of a page template field currently on air without using an on and off animation. 14. Implemented the ability to replace Microsoft Excel spreadsheets from within the Global Fields Manager control box. 15. Implemented invert functionality on the Layer Tree control box. 16. Implemented that a Cue page action ensures that the Playout Controls are displayed. 17. Implemented option to copy changes to page attributes made using the Page List to the page open in the Graphic Edit window. 18. Display preview information setting now available for Clarity Prep software derivative.
7.1.1.5	For a full description see New Features> 52 7.1.1.5 63
	1. Implemented enhancements to the automatic generation of page names from text functionality.

Release	Brief description of new features
7.1.1.6	For a full description see New Features> 52 7.1.1.6 63
	1. Implemented the automatic location of associated audio clips using the current video clip path. 2. Support for MXF Export and enhanced MXF Import now implemented as a separate plugin. 3. Implemented the clearing of the designated Edit output when the Graphic Edit window is closed.
7.1.1.7	For a full description see New Features> 52 7.1.1.7 64
	1. Cel animation timeline information now maintained after updating page template field.
7.1.1.8	For a full description see New Features> 52 7.1.1.8 64
	1. Implemented a maximum limit to the number of Smart Cache entries. 2. Implemented the ability to select a different font when inserting a symbol. 3. Import subtitle functionality now features GBK encoded code page support. 4. Implemented improvements to Styles functionality in the CG Tools software. 5. Implemented improvements to Logos and Logo Fonts functionality in the CG Tools software.
7.1.1.9	For a full description see New Features> 52 7.1.1.9 66
	1. Implemented the ability to reset CG Tools GUI positioning. 2. Implemented new Text>Reverse Lines menu command. 3. Implemented warning message if a page will not play out all clips. 4. Implemented Cut Standard Move animation effect. 5. Implemented interactive resizing of logos within text pages. 6. Implemented interactive configuration of A to B animation effects. 7. Removed the Don't ask me again check box from the Select Page Paste Mode dialog box.
7.1.2.0	No new features in this release.
7.1.2.1	For a full description see New Features> 52 7.1.2.1 67
	1. Implemented that pages, when reverted to non-template page status, should have the read-only setting cleared as well.

Section 3
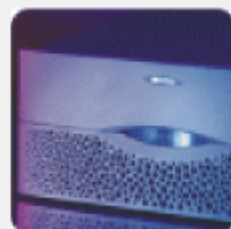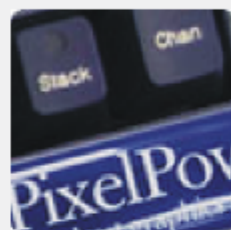
Supporting applications and
tools release notes

3. Supporting applications and tools release notes

The following Pixel Power support/newsroom automation software applications are available for inclusion in the release notes.

Application	Description	Availability	
		Optional at extra cost	Part of the CG Tools suite
Active X Control	Front-end to the graphics database hosted on the Pixel Power Control Centre server. The ActiveX plug-in provides tight, visual integration of the graphics content of a newscast with the newsrooms' desktop working environment.	■	
Chyron Remote Control Server	Converts Chyron Infinite remote control protocol commands supplied via a serial communications port into Clarity DCOM network control calls.		■
Clarity Control Toolbox 836	The Clarity Control Toolbox delivers the quickest possible route to custom control interfaces for Clarity systems. It provides a toolset for the rapid development of customized user interfaces for lottery, elections, sports and game shows.	■	
Clarity COM 1008	Microsoft compatible COM object giving the ability to update data and control a Clarity system unit using the Clarity XML protocol. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
Clarity XML Serial Server	Application for parsing Clarity XML protocol commands via a serial port. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
Clarity XML Socket Server 1010	Application for parsing Clarity XML protocol commands via one or more TCP/IP sockets. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
iNews Active X Control	Front-end to the graphics database hosted on the Pixel Power Control Centre server. The ActiveX plug-in provides tight, visual integration of the graphics content of a newscast with the newsrooms' desktop working environment.	■	
Media Shop	Media Shop is a tool for converting between different formats of video and audio the results of which can be used with the CG Tools software.		■
Pixel Browser ASP Client	Utilises the graphics database and cached images that have been searched/created by the Pixel Power Control Centre and enables these searches to be defined and displayed by a client via Microsoft Internet Explorer.	■	

3. Supporting applications and tools release notes

Pixel Power Control Centre (PPCC)	Provides core support for the integration of Pixel Power graphics systems with AP ENPS, AVID iNews, Dalet and other MOS enabled newsroom systems. The systems MOS gateway supports close integration of one or multiple Clarity systems with an ENPS-based newsroom, including the use of our Pixel Power ActiveX plug-in for ENPS within the newsroom desktops. The system also provides supporting services for the Pixel Power ActiveX plug-in for AVID iNews.	■	
Pixel Promo	Semi-customised software application that can be used in conjunction with Clarity character generators to automate channel branding and promotion. It imports data from a traffic system and batch builds promo page sequences based on pre-defined templates. The traffic data is searched according to a defined set of rules to automatically extract show titles and build multiple lineup bumpers.	■	
RapidRecall Keypad Server [1025]	Communicates between a defined a physical RapidRecall Keypad or RapidRecall virtual keypad and a Clarity system unit being used for playout. The application has the facility to connect to physical keypads that are connected both via an ethernet network and via a serial port on the local host system. Included as part of the Automation interface [LICENSED] [CLARITY] [17] option.		■ (a) [835]
RapidRecall virtual keypad [1030]	Mimics a physical Version 2 RapidRecall Keypad and can be used to control the playout of the Clarity software on the same system or another Clarity system unit on the same network.		■

a.   (CG and GX derivatives only; optional for TG)

3.1   Releases made in 2006

Release notes detail the new features implemented in one or more supporting applications and any bug fixes implemented in relation to previous releases. This is intended to provide an indication of new features available with this release and the progress since the last major release.

The following sections detail new content and corrections for each periodic release.

Link
07/06/2006 to 10/10/2006 [45]
26/04/2006 to 06/06/2006 [47]

3.1.1   07/06/2006 to 10/10/2006

Pleases select one of the following links to find out more about supporting applications and tools.

Known problems [46]
New features [46]
Updates to documentation not linked to current or previous releases [46]

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

3.1.1.1 Known problems

The table below highlights the known problems in each release.

Description of problem	ID	Application	Version
DropDownListToFields control does not use XML file page number For the DropDownListToFields ⌐903⌐ control, the page number and field numbers should be read from the XML file that is referenced by the XmlDataFile ⌐905⌐ property. Unfortunately only the field numbers are; the page number is taken from the control property setting. Another restriction of the control is that you can only have one page number specified in the XML file. Multiple page/field number combinations could b enabled in future releases.	N/A	Clarity Control Toolbox ⌐44⌐	1.0.0.5

3.1.1.2 New features

The table below highlights the new features implemented in each release.

Description of feature	ID	Application	Version
Implemented support for searching for templates by number Previously, Active X template searches only allowed searching for the contents of page names. You can now search by template number as well.	0431	Active X Control ⌐44⌐	4.1.0.7
Ability to search for templates using iNews resource info Previously, template searches could only be based on the CG Tools page name. You can now conduct searches based on the contents of the iNews resource file for that template.	0436	iNews Active X Control ⌐44⌐	4.1.0.8
Implemented the ability to convert Clarity video clips from PAL to NTSC.	0434	Media Shop ⌐44⌐	N/A

3.1.1.3 Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content ⌐47⌐
Corrections ⌐47⌐

3.1.1.3.1 New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description
None	None

3.1.1.3.2 Corrections

The following corrections were added to this version.

Topic and sub topics	Description
None	None

3. Supporting applications and tools release notes

Releases made in 2006

3.1.2 26/04/2006 to 06/06/2006

Pleases select one of the following links to find out more about supporting applications and tools.

Known problems 47
New features 47
Updates to documentation not linked to current or previous releases 47

3.1.2.1 Known problems

None at time of release.

3.1.2.2 New features

The tables in subsequent sections highlight the new features implemented in each release.

Description of feature	ID	Application	Version
Log file names now included in log file filename Makes it easier to keep track of which log file you are looking at when you have multiple files open at the same time.	0294	Pixel Power Control Centre 44	4.1.0.6
Implemented the ability to abort scanning of locations To enable the ability to abort the scanning of locations, an Abort button has been inserted on the Pixel Browser Administrator user interface.	0377	Pixel Power Control Centre 44	4.1.0.3
Extra data now maintained for edited MOS objects in ENPS.	0378	Active X Control 44	4.1.0.4
Implemented speed improvements to facilitate faster display of database contents within the Pixel Browser Administrator.	0379	Pixel Power Control Centre 44	4.1.0.3
Implemented connected ActiveX count to PPCC log files.	0405	Pixel Power Control Centre 44	4.1.0.6

3.1.2.3 Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content 47
Corrections 47

3.1.2.3.1 New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description
None	None

3.1.2.3.2 Corrections

The following corrections were added to this version.

Topic and sub topics	Description
None	None

Section 4

CG Tools release notes

4. CG Tools release notes

The following main Pixel Power software applications are available for inclusion in the release notes.

Application	Description
Avid AVX Plugin (Clarity Plugin)	Version of the Clarity PREP software that runs as an AVX plugin within the Avid® Media Composer or Symphony editing environment.
Clarity	Clarity is a Microsoft Windows XP® based High Definition (HD) and/or Standard Definition (SD) on-air and post-production graphics software application to be installed and used on Clarity system units (e.g. Clarity 100, 200, 300, 3000, 500 and 5000).
Clarity PREP	Clarity PREP is a Microsoft Windows NT/2000/XP® based High Definition (HD) and Standard Definition (SD) off-air and post-production graphics solution comprising of editing software without dedicated graphics hardware (a Clarity system unit and peripherals).

4.1 CG Tools versions 7.0.2.3 to 7.1.2.1

Release notes detail the new features implemented in the CG Tools software and any bug fixes implemented in relation to previous releases. This is intended to provide an indication of new features available with this release and the progress since the last major release.

The following sections detail new content and corrections for each periodic release.

CG Tools version	Link
7.1.2.1	H059W004_Rev02_D, CG Tools version 7.1.2.1, 10/10/2006 52
7.1.0.8	H059W004_Rev02_C, CG Tools version 7.1.0.8, 07/06/2006 69
7.1.0.6	H059W004_Rev02_B, CG Tools version 7.1.0.6, 13/04/2006 74
7.1.0.0	H059W004_Rev02_A, CG Tools version 7.1.0.0, 07/02/2006 79

For information on previous releases, see the following page on our website:

http://www.pixelpower.com/resources_downloads.aspx

4.1.1 H059W004_Rev02_D, CG Tools version 7.1.2.1, 10/10/2006

Fourth draft release of revision two to coincide with the release of version 7.1.2.1 of the CG Tools software.

Known problems 52
New features 52
Updates to documentation not linked to current or previous releases 67

4.1.1.1 Known problems

None at time of release.

4.1.1.2 New features

The tables in subsequent sections highlight the new features implemented in each release.

7.1.0.9 53
7.1.1.0 53
7.1.1.1 58
7.1.1.2 59
7.1.1.3 60
7.1.1.4 61

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

4.1.1.2.1   7.1.0.9

The following new features were implemented in version 7.1.0.9 of the CG Tools software.

Description of feature	ID	Application	Version
Implemented UpdateFields XML remote interface mechanism Enables multiple fields to be updated with a single call.	1308	Clarity, Clarity PREP 52	7.1.0.9
Implemented UpdateGlobalFields XML remote interface mechanism Enables global fields to be updated directly rather than via a normal field update.	1309	Clarity, Clarity PREP 52	7.1.0.9

4.1.1.2.2   7.1.1.0

The following new features were implemented in version 7.1.1.0 of the CG Tools software.

Description of feature	ID	Application	Version

Next Free key action now finds next free page after your current edited page
When storing or reading the page being edited in the Graphic Edit window using the Store Page 191 and Read Page 191 keys on the Version 2 Rapidaction keyboard 183, before pressing Store Page/Read Page, if the Next Free key 193 on the numeric keypad is pressed without previously typing a number on the numeric keypad, the next free page (a page that has not been edited) after your current edited page is now read from OR stored to by default. This behaviour can be configured using the controls in the Next Free Page group box. The controls in this group box define how the CG Tools software finds the next free page after pressing the Next Free key on the Version 2 Rapidaction keyboard. You can configure the software to search from the first page in the current job 818, the last accessed page 818, the last stored page 818 and from a fixed page number 818. Also made searching consistent between the Next Free and Store Next Free keys.
User Preferences dialog box 809
    General dialog tab 816
        Next Free Page group box 817
	0260	Clarity, Clarity PREP 52	7.1.1.0

Implemented the ability to turn off automatic reloading of jobs
When Clarity is under automation control, some automation systems (ProBel) send job load requests prior to every command to ensure that the latest job is loaded. If graphic departments are updating a job on a regular basis, then there is a requirement for the updated job to be loaded only after a specific request is received. The Do not check for job reloads check box enables the user to stop the CG Tools software loading a version of the current job automatically that features a later date and time stamp. A newer version of the job will only be loaded when a explicit request is received.
Local Preferences dialog box 696
    Automation dialog tab 704
        Do not check for job reloads 706
	0412	Clarity, Clarity PREP 52	7.1.1.0

Description of feature	ID	Application	Version
Implemented edge effects for Paste Live and Paste Clip objects Edge effects can now be configured for Paste Live and Paste Clip objects using a limited set of effects made available via the Edge Effects control tab. Also implemented the new Soft Border and Double Outer Border effects that are available for all graphic elements. Edge effects [470] 　Double Outer Border [472] 　Soft Border [475] Graphic Tools [266] 　Control tabs [266] 　　Edge Effects (Edge) [281] Edge Effects [470]	0413	Clarity, Clarity PREP [52]	7.1.1.0
Implemented Fade Standard Move animation effect There always has been a way of achieving a Fade effect, but this has been non-intuitive via the Standard Move [534] Wipe [535] effect, in conjunction with a fade direction. There is now a dedicated Standard Move Fade effect. Standard Move [534] 　Descriptions 　　Fade [535]	0414	Clarity, Clarity PREP [52]	7.1.1.0
Implemented separate on and off cushions for animation effects You can now have separate on and off cushions with optional user-defined durations. The cushion duration can also be calculated automatically. The Auto Cushion Durations function mirrors the previous way that cushions worked using the Cushion check box. Animation Marker dialog box [565] 　Options group box [573] 　　Auto Cushion Durations check box [574] 　　Start Cushion and End Cushion increment boxes [578]	0415	Clarity, Clarity PREP [52]	7.1.1.0
Implemented the ability to define animation time in minutes as well as seconds and frames. Applies to the Continuous Ticker, Roll, Crawl, Reverse Roll, Reverse Crawl animation effects (when there are no Twists or Stagger set). Animation Marker dialog box [565] 　Settings group box [578] 　　Duration increment boxes [580]	0416	Clarity, Clarity PREP [52]	7.1.1.0
Implemented limited off moves for the Continuous Ticker animation effect Limited to a Cut or Fade effect. Also implemented the option to trail the animation off screen. The Trail Ticker Off check box prevents the ticker from looping or fetching new data after it has been triggered to animate off screen. Animation Marker dialog box [565] 　Options group box [573] 　　Cut and Fade radio buttons [574] 　　Trail Ticker Off check box [578]	0417	Clarity, Clarity PREP [52]	7.1.1.0
Implemented Start On Screen and End On Screen options for animations Implemented the new Start On Screen and End On Screen check boxes for the following animation effects: Continuous Ticker, Flash, Crawl, Reverse Roll, Reverse Crawl and Roll. Makes them more consistent with the page-based animations. Replaces the previous Start on and End on radio buttons. Animation Marker dialog box [565] 　Options group box [573] 　　End On Screen radio button [575] 　　Start On Screen radio button [577]	0418	Clarity, Clarity PREP [52]	7.1.1.0

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version
Implemented improvements to motion markers Motion markers have been improved in a number of ways: • New Stop motion marker 521 type added. Enables the end position of an animation effect to be defined. • New Pause & Speed motion marker 517 type added. Enables a pause to re-start at a different speed. (This is not initially supported with page based foreground Rolls and Crawls). • New Trigger motion marker type 523 added. Enables a trigger key to be sent when motion reaches a given screen position. (This is not initially supported with page-based foreground Rolls and Crawls). All motion marker types can now feature an optional target screen position. Once enabled, this target position can be graphically manipulated in a similar fashion to masks applied to animation markers 572. Note that motion markers only apply within page based foreground Rolls and Crawls and the following Cool Move animation effects: Continuous Ticker, Roll, Crawl, Reverse Roll, Reverse Crawl (when there are no Twists or Stagger set). Motion markers 514 Motion Marker dialog box 739	0419	Clarity, Clarity PREP 52	7.1.1.0

Field marker width editing now consistent with mask editing
Now that animation marker masks and motion marker targets can be dragged using handles within the Graphic Edit window, this method of editing has been implemented to edit the width of page template field markers.
Graphic Tools 266
    Control tabs 266
    Field Settings (Field) 283
	0420	Clarity, Clarity PREP 52	7.1.1.0

Implemented optional DSK bypass of black rather than live source
You can now define the DSK bypass behaviour to pass through either a live source or black.
SD Hardware Configuration [CLARITY] [SD] dialog box 786
    DSK A/B dialog tab 792
        DSK Bypass group box 792
	0421	Clarity, Clarity PREP 52	7.1.1.0

Auto Select Online Cued Page option renamed
The previous Auto Select Online Cued Page option has been renamed.
Job List View - Display Options dialog box 677
    Keep Online Cued Page Visible group box
        Auto Select Online Aired Page check box 678
	0422	Clarity, Clarity PREP 52	7.1.1.0

Implemented the ability to set a preview frame for a job page
When previewing a page using the Timeline control box, you can now configure a preview frame for the page. The defined preview frame is displayed when the page is cued online (the frame will not be used when creating the page thumbnails). The preview frame can also be set numerically using the Set Playout Preview dialog box. When cueing pages, this functionality uses the software playout channel to render the correct preview frame and therefore the software playout channel must be available.
Control boxes 326
    Preview Windows 350
    Timeline 355
Menus 378
    Page> 390 Set Page Preview Frame 395
Set Playout Preview dialog box 800
	0423	Clarity, Clarity PREP 52	7.1.1.0

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Description of feature	ID	Application	Version
Implemented visual warnings when a page is open for editing whilst a page containing triggers is online Whilst online, if a page containing triggers is on-air, trigger keys cannot work if a page is open for editing in the Graphic Edit window [260] and a text element on that page is selected. This is due to keypress being interpreted by the text element being edited. Instances of the above situation are now indicated using a combination of three visual cues: a) When a text element is selected, a warning message is added to the title bar of the Playout Controls control box [343]. b) Additionally, if the selected text element contains a trigger, the current playout channel is highlighted red in the Page playout information area [344]. c) Additionally, if you have selected to keep online cued pages visible and have checked the Auto Select Online Aired Page box [678] on the Job List View - Display options dialog box [677], when triggers cannot be sent to one of the on-air channels, the page is highlighted red in the Page List [252].	0424	Clarity, Clarity PREP [52]	7.1.1.0

Full key now forced on page background images which contain no key information
Page background images which are imported from files containing no key/alpha information are now assumed to have full-key (instead of zero key).
Page Settings dialog box [751]
  Background dialog tab [756]
    Type radio buttons [757]
      Picture radio button [758]
	0425	Clarity, Clarity PREP [52]	7.1.1.0

Lock Fields functionality now applies to all text layers on a page
Now that you can move between fields on multiple text layers using the TAB key, it became apparent that the layers could have the Lock Fields setting applied independently. The Lock Fields setting is now applied to all text layers on the page currently open for editing.
Menus [378]
  Text [408]
    Markers
      Lock Field [413]
Keyboards [177]
  Key reference [185]
    RapidAction keys [185]
      RapidAction keyboard version 2 [188]
	0426	Clarity, Clarity PREP [52]	7.1.1.0

Increments now definable when manipulating text
When using the keyboard shortcuts [205] to manipulate text (movement, spacing etc.), the maximum increment was previously set a 5 pixels. You can now define the maximum increment in pixels. You can also define the increment value in pixels used when text within a text page is manipulated or when a text line or spline is manipulated using keyboard shortcuts that feature the right SHIFT key.
User Preferences dialog box [809]
  Edit dialog tab [810]
    Arrow Key Acceleration group box [810]
	0427	Clarity, Clarity PREP [52]	7.1.1.0

Sub-pixel increments now available when manipulating text
Using the Left SHIFT key in addition to the existing compounded keyboards shortcuts will enable use of sub-pixel increments (slow/accurate) for the selected action.
Keyboards [177]
  Keyboard shortcut reference [201]
    Shortcuts for use when working with a page in the Graphic Edit window [203]
      Working with text manipulation [205]
	0428	Clarity, Clarity PREP [52]	7.1.1.0

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version

Default system wide font and character height can now be specified
You can select a system wide font and character height that will be used by all text elements. Implemented using the Default Font drop-down list box and Height text box on the Edit dialog tab on the User Preferences dialog box.
User Preferences dialog box [809]
    Edit dialog tab [810]
        Text Settings group box [814]
            Default Font drop-down list box [814]
        Height text box [815]
	0429	Clarity, Clarity PREP [52]	7.1.1.0

Implemented the ability to set default values for animations The Animation Marker dialog box in the Advanced state now features a new Default button which enables the configuration of parameters on the dialog box with default, sensible values. Animation Marker dialog box [565] Default Values button [568]	0430	Clarity, Clarity PREP [52]	7.1.1.0

Implemented the ability to export to the Apple QuickTime format
The Playout File Output control box now supports the output of jobs to the Apple QuickTime .MOV format. Implementation of this feature has provoked the creation of the Compression Settings dialog box, enabling the selection of a video codec and compression settings for the QuickTime (.MOV) movie being output.
Graphical User Interface (GUI) tour [245]
    Control boxes [326]
        Playout File Output [347]
Compression Settings dialog box [599]
	0433	Clarity, Clarity PREP [52]	7.1.1.0

Implemented the option to disable the use of filenames when exporting pages
The previous Filename text box is now accompanied by an adjacent check box which enables the selection of whether the specified filename prefix should be used when naming exported pages.
Export Pages dialog box [635]
    Filename Rule group box [636]
        Filename check box and text box [636]
	0435	Clarity, Clarity PREP [52]	7.1.1.0

Embedded audio data status now selectable on a per-channel basis
The status of channels as audio (PCM) and non-audio (DATA) within an embedded audio group was previously only available on a group-wide basis (for 1/2/3/4). You can now specify to pass different audio signal types through channels 1/2 and 3/4 of the group. This has been implemented using the Format 1/2 and Format 3/4 drop-down list boxes in the Audio Formats / Delays group box.
Local Preferences dialog box [696]
    Audio Settings dialog tab [CLARITY] [697]
        Chan A/B I/O dialog sub-tab [697]
            Audio Formats / Delays group box [698]
	0439	Clarity, Clarity PREP [52]	7.1.1.0

Implemented improvements to the Style Protect (Prot) control tab
Implemented the Invert button which inverts the state of all check boxes featured on the Style Protect (Prot) control tab. Protection settings are now grouped under the the two main categories of use (protection for text and effects). This is achieved using the controls in the Text and Effect group boxes respectively. The previous Effect check box has been renamed to Edge Effect to reflect its true function. The previous Mix check box has been renamed to Transparency to reflect its true function. The previous Line Spacing check box has been renamed to Lock Line Spacing and has been placed in the Formatting group box to make it clear that it applies to page formatting and NOT style protection.
Graphic Tools [266]
    Control tabs [266]
        Style Protect (Prot) control tab [293]
	0441	Clarity, Clarity PREP [52]	7.1.1.0

Description of feature	ID	Application	Version

Implemented improvements to Style Copy functionality
Cursor appearance now changes depending on the state of Style Copy check box on the Text Page control set. This enables you to see immediately whether the style copy function is turned on. The colour of the cursor is set using the new controls in the Text Settings group box on the Edit dialog tab of the User Preferences dialog box. Use the Cursor Color With Style Copy On control to change the cursor colour. The style copy functionality can be now be configured to be always off, always on or user changeable. This functionality can be configured using the Lock Style Copy drop-down list box. If this function it set to Always On or Always Off, then the Style Copy check box on the Text Page control set is disabled.
Graphic Tools 266
    Static control area 300
        Text Page 313
User Preferences dialog box 809
    Edit dialog tab 810
        Text Settings group box 814
            Cursor Color With Style Copy On control 814
            Lock Style Copy drop-down list box 815
	0442	Clarity, Clarity PREP 52	7.1.1.0

4.1.1.2.3   7.1.1.1

The following new features were implemented in version 7.1.1.1 of the CG Tools software.

Description of feature	ID	Application	Version

Implemented improvements to parameter updates when editing text page selections
After selecting an area of text that features differing attributes over the entire selection, only common parameters available in the Text Page control set and <edge effect><foreground/edge/shadow colour selector> set that are configured across the entire selection will be interpreted intelligently for configuration.
 	
For example, if a selected area of text in a text page features multiple text heights, then the Height increment box will show no value. This does NOT mean that the value cannot be configured, but if it is, it will apply to the entire selection and the different text heights will become consistent.
 	
The same behavior applies with the colour selection boxes; if a selected area of text in a text page features multiple colours defined for the same colour plane (e.g. foreground), the relevant colour selection box(es) will be greyed out. Again, this does NOT mean that the colour cannot be configured, but if it is, it will apply to the entire selection and the different colours will become consistent.
Graphic Tools 266
    Static control area 300
        <edge effect><foreground/edge/shadow colour selector> 302
        Text Page 313
	0446	Clarity, Clarity PREP 52	7.1.1.1

Obscuring squeezebacks now mute DSK background audio When using the Playout Live Sources 447 audio source, if a page has a live background, when a squeezeback resizes up to full screen, the audio associated with the live background now mutes in the same way as audio associated with Paste Live object that is obscured.	0448	Clarity, Clarity PREP 52	7.1.1.1

Implemented the ability to use the SHIFT or CTRL keys together with the F1-12 function keys to trigger animations
You can now use the F1-F12 function keys together with the SHIFT and CTRL keys to define animation triggers.
Animation Marker dialog box 565
    Trigger group box 583
        Key text box 584
	0449	Clarity, Clarity PREP 52	7.1.1.1

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version

Implemented a new type of Store Page action
 Implemented a new store page action that when triggered, stores the edited page to the selected page, clear all links to global fields on stored page, and then re-edit the original page. Implemented using the new `PPStoreClearEdit` extended key action. It is assigned to the Left CTRL + Left ALT + Left SHIFT + S shortcut for all keyboards, and the Left CTRL + Left SHIFT + Store Page shortcut explicitly for RapidAction keyboards.
 Keyboards 177
    Key reference 185
       RapidAction keys 185
          RapidAction keyboard version 1 185
          RapidAction keyboard version 2 188
    Keyboard shortcut reference 201
       Shortcuts for use when working with a page in the Graphic 203
          Working with pages 204
	0450	Clarity, Clarity PREP 52	7.1.1.1

Implemented improvements to the re-draw speed of the Page List.	0451	Clarity, Clarity PREP 52	7.1.1.1

4.1.1.2.4   7.1.1.2

The following new features were implemented in version 7.1.1.2 of the CG Tools software.

Description of feature	ID	Application	Version

Implemented improvements to font identification on the GUI when editing text pages
 When selecting an alternative font, you have the option of filtering font types to make identification and selection easier. After opening the drop-down list box, you can select either All, TrueType or Logo at the bottom of the list to filter the font types displayed.
 Graphic Tools 266
    Static control area 300
       Text Page 313
	0447	Clarity, Clarity PREP 52	7.1.1.2

Implemented Export Page and Export Pages tools
 Tools that mirror the File>Export>Export Page and File>Export>Export Pages commands are now located on the Standard toolbar.
 Main CG Tools application window 246
    Standard toolbar 247
 Menus 378
    File> 378 Export>Export Page 382
    File> 378 Export>Export Pages 382
	0452	Clarity, Clarity PREP 52	7.1.1.2

Restructured CG Tools Help menu
 Menu commands are more concise and easier to understand. The menu structure is now totally flat with no sub-menus. Commands have been renamed and two commands have been added enabling direct access to help on RapidAction keys and generic keyboard shortcuts that are valid for all keyboard types. References to HTMLHelp have been removed from the software and documentation.
 Using this documentation and other support resources 90
    Accessing help information whilst using the CG Tools software 92
       Help menu 93
 Menus 378
    Help 434
	0453	Clarity, Clarity PREP 52	7.1.1.2

Implemented improved software start-up checking to distinguish between Clarity and Clarity Prep software derivatives.	0454	Clarity, Clarity PREP 52	7.1.1.2

Description of feature	ID	Application	Version
Implemented the ability for motion markers to action on Continuous Ticker animations loops Motion markers that have been inserted to control Continuous Ticker animation effects can be configured to action on all loops, the first loop only, the last loop only and first and last loop only. Motion Marker dialog box [739] Ticker loop options group box [741]	0456	Clarity, Clarity PREP [52]	7.1.1.2

Implemented Start On Screen option for Continuous Ticker animations
 Made the new Start On Screen check box available for the Continuous Ticker animation effect. Also see 0418 [53].
 Animation Marker dialog box [565]
    Options group box [573]
       Start On Screen radio button [577]
	0457	Clarity, Clarity PREP [52]	7.1.1.2

4.1.1.2.5   7.1.1.3

The following new features were implemented in version 7.1.1.3 of the CG Tools software.

Description of feature	ID	Application	Version

Implemented fixed positioning for page template field markers
 Page template field markers can now have their position fixed using the Fixed Position text box, meaning that they are no longer subject to movement due to changes in the text in the page.
 Graphic Tools [266]
    Control tabs [266]
       Field Settings (Field) [283]
	0458	Clarity, Clarity PREP [52]	7.1.1.3

Implemented changes to Apple QuickTime colour depth setting when exporting to .MOV files Apple refers to colour depths in terms of numbers of colours. The Compression Settings dialog box is now updated to conform to these colour conventions. Compression Settings dialog box [599]	0459	Clarity, Clarity PREP [52]	7.1.1.3

Implemented the ability for digital clocks to send triggers at defined points in time
 Enables digital clocks to trigger other animations/elements on the current page when a specific time is reached. A new control tab titled Action has been added to the Graphic Tools [266].
 Graphic Tools [266]
    Control tabs [266]
       Action control tab [268]
	0460	Clarity, Clarity PREP [52]	7.1.1.3

Digital clocks now feature separate start, stop, reset and lap trigger keys
 Previously, digital clocks could only be started/stopped using the same trigger key. The same applied to reset/lap. You now have the ability to specify individual trigger keys for the four actions respectively.
 Graphic Tools [266]
    Control tabs [266]
       Digital Clock Settings (Clock) [280]
	0461	Clarity, Clarity PREP [52]	7.1.1.3

Implemented stop times for Stopwatch and Global Stopwatch digital clock types
 You can now define a stop time for a selected Stopwatch and Global Stopwatch digital clock. This feature was introduced to enable triggers to be actioned when the stopwatch is stopped (see 0460).
 Graphic Tools [266]
    Control tabs [266]
       Digital Clock Settings (Clock) [280]
	0462	Clarity, Clarity PREP [52]	7.1.1.3

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

| 4.1.1.2.6 | 7.1.1.4 |

The following new features were implemented in version 7.1.1.4 of the CG Tools software.

Description of feature	ID	Application	Version
Implemented improvements to style selection when overwriting and deleting text With the Style Copy function turned on (Style Copy check box on the Text Page control set 313), if you now select a text element and position the text cursor within the text, when you change styling attributes and subsequently enter new text and delete the text back to the original text cursor position, when you start typing again, the changes to the styling attributes that were made earlier are remembered. Previously, style changes were lost.	0463	Clarity, Clarity PREP 52	7.1.1.4

Implemented label for spline type
Removes ambiguity on the Text Spline control set on the Graphic Tools.
Graphic Tools 266
    Static control area 300
        Text Spline 315
	0464	Clarity, Clarity PREP 52	7.1.1.4

Implemented label for shading type
Removes ambiguity on the Colour control tab on the Graphic Tools.
Graphic Tools 266
    Control tabs 266
        Colour control tab 277
	0465	Clarity, Clarity PREP 52	7.1.1.4

Renamed the User Defined Styles (Styles) control tab to (Crop Styles) when non-text based elements are selected
When text elements are selected within the Graphic Edit window 260, the User Defined Styles control tab is named Styles and enables all of the attributes associated with text styling (e.g. font, height, colour, edge effect, position etc.) to be stored for subsequent recall. When shapes and cutouts are selected, the User Defined Styles control tab is named Crop Styles. This naming change gives an indication of the functionality offered when these types of graphic element are selected. The User Defined Styles control tab enables you to store ONLY size, position and cropping settings for graphic shapes and cutout images.
Graphic Tools 266
    Control tabs 266
        User Defined Styles control tab 298
	0466	Clarity, Clarity PREP 52	7.1.1.4

Colour control tab 277 is now selected automatically when the User Defined Styles (Styles) control tab 298, Logos control tab 289 or Logo Fonts (Logos) control tab 287 is floated.	0467	Clarity, Clarity PREP 52	7.1.1.4

Preview list on the User Defined Styles control tab now scrolls to make sure the selected style is visible
With the Style Copy function turned on (Style Copy check box on the Text Page control set 313), when you move the cursor to a location which is formatted with a user defined style, the Preview list on the User Defined Styles control tab now scrolls to make sure the selected style is visible.
Graphic Tools 266
    Control tabs 266
        User Defined Styles control tab 298
	0468	Clarity, Clarity PREP 52	7.1.1.4

Dialog boxes that feature file and folder navigation now each remember their own folder to further improve basic usability.	0469	Clarity, Clarity PREP 52	7.1.1.4
File menu re-organised to improve command accessibility The File menu 378 structure has been flattened to remove the requirement for separate sub-menus, thus permitting fewer mouse clicks to complete required tasks.	0470	Clarity, Clarity PREP 52	7.1.1.4
Image previews in file based dialog boxes now appear correctly Also, the thumbnail view now displays file information like size etc.	0471	Clarity, Clarity PREP 52	7.1.1.4
Dialog boxes now remember their size and position.	0472	Clarity, Clarity PREP 52	7.1.1.4

Description of feature	ID	Application	Version
Pixel Power Job (.ppj) file extension is no longer shown within the Save Clarity Job dialog box 781.	0473	Clarity, Clarity PREP 52	7.1.1.4
Implemented the ability to update field data in place With update/revert mode 547 turned on and whilst online, you can now press CTRL + U to update any page template fields that are configured with an update effect (see Field Settings (Field) control tab) 283 that have been manually edited. This action will update the text currently displayed on air.	0474	Clarity, Clarity PREP 52	7.1.1.4

Implemented the ability to change the contents of a page template field currently on air without using an on and off animation
You can now update the contents of a page template field on air "in place" without using an on and off animation. You can also configure an update effect (only a Cut effect is implemented at this time) independently for a page template field. An update occurs as soon as the field is updated, without any additional triggering. Page template fields that are configured with an update effect can still be animated on and off screen using an animation marker in the usual way.
Graphic Tools 266
   Control tabs 266
      Field Settings (Field) control tab 283
	0475	Clarity, Clarity PREP 52	7.1.1.4

Implemented the ability to replace Microsoft Excel spreadsheets from within the Global Fields Manager control box
If you have linked global fields to data sources that reference an Microsoft Excel spreadsheet or Microsoft Access database etc., if the location of the file has changed, you can now change the path that locates the file so that it updates all global fields at the same time with the revised location.
Control boxes 326
   Global Fields Manager control box 333
      Browse for alternative <file type> dialog box 335
      Replace Paths dialog box 339
	0477	Clarity, Clarity PREP 52	7.1.1.4

Implemented invert functionality on the Layer Tree control box
Because the Layer Tree control box already has Hide All, Show All, Lock All & Unlock All shortcut menu entries, for completeness, the Invert Visible and Invert Locks shortcut menu entries have been implemented which, when selected, invert selections. Indication of the front/back layer is now also shown on the user interface.
Control boxes 326
   Layer Tree control box 341
   Shortcut menu 342
	0478	Clarity, Clarity PREP 52	7.1.1.4

Implemented that a Cue page action ensures that the Playout Controls are displayed
If the Playout Controls control box is not currently displayed, when a Cue action is initiated, the Playout Controls control box is automatically shown, thus ensuring that playout status information can be viewed.
Graphical User Interface (GUI) tour 245
   Control boxes 326
      Playout Controls 343
	0479	Clarity, Clarity PREP 52	7.1.1.4

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version

Implemented option to copy changes to page attributes made using the Page List to the page open in the Graphic Edit window
Previously, with update/revert mode 547 turned on, if you made changes to page attributes (page name, transition, background etc.) using the Page List whilst you have that page open in the Graphic Edit window, those changes are not copied to the page being edited. Subsequently storing the edited page resulted in these changes being lost. The CG Tools software now requests if you want to copy changes to an edited copy of the page.
Graphical User Interface (GUI) tour 245
    Job Edit window 250
        Page Browser and Page List
            Interacting with the Page List using the mouse and keyboard 255
    Graphic Edit window 260
        Saving or rejecting changes made to the current page open for editing 265
	0481	Clarity, Clarity PREP 52	7.1.1.4

Display preview information setting now available for Clarity Prep software derivative
The Display preview information setting previously located in the Auxiliary Outputs group box on the General dialog tab on the Local Preferences dialog box is greyed out if you do not have Clarity hardware. This setting is now available for Clarity Prep due to the availability of the UI channel. This setting has been also been moved to the Preview Options group box.
Local Preferences dialog box 696
    General dialog tab 714
        Preview Options group box 718
	N/A	Clarity, Clarity PREP 52	7.1.1.4

4.1.1.2.7   7.1.1.5

The following new features were implemented in version 7.1.1.5 of the CG Tools software.

Description of feature	ID	Application	Version

Implemented enhancements to the automatic generation of page names from text functionality
Now, if there are no text layers present on a page, the page name is taken from background image name or clip name (if specified).
User Preferences dialog box 809
    General dialog tab 816
        Page Naming group box 818
            Automatically generate name from text on page check box 818
	0482	Clarity, Clarity PREP 52	7.1.1.5

4.1.1.2.8   7.1.1.6

The following new features were implemented in version 7.1.1.6 of the CG Tools software.

Description of feature	ID	Application	Version
Implemented the automatic location of associated audio clips using the current video clip path When specifying a video clip that has one or more associated audio clips, the folder containing the video clip is now used as an alternative search path for the audio clip(s). This enables the associated audio clip fields specified using the A1/A2/A3/A4 dialog tab 775 on the Clip Properties (Video) dialog box 775 to contain just the name of the audio clip file (instead of the full file path). As long as the video and associated audio clips are in the same folder, the audio associations will work. They can also then be copied to a directory on another clip drive and the audio associations will still be valid.	0483	Clarity, Clarity PREP 52	7.1.1.6

Description of feature	ID	Application	Version

Support for MXF Export and enhanced MXF Import now implemented as a separate plugin
MXF functionality has now been implemented via a separate library/plugin top improve flexibility. If the plugin is installed, the licensed MXF Import and Export functionality ⌐26¬ of the plugin is available through both CG Tools and Media Shop ⌐44¬. Also made changes to the File menu structure. The Import and Export sub menus have been implemented and the MXF Import and MXF Export commands now reside under these respective menus.
Optional licensed features and other product options available for one or more products or derivatives ⌐13¬
    MXF Plugin [LICENSED] ⌐26¬
        MXF MPEG Codec ⌐26¬
MXF Import dialog box ⌐743¬
MXF Export dialog box ⌐741¬
File> ⌐378¬ Import>MXF Import ⌐382¬
File> ⌐378¬ Export>MXF Export ⌐383¬
	0485	Clarity, Clarity PREP ⌐52¬	7.1.1.6

Implemented the clearing of the designated Edit output when the Graphic Edit window is closed
Previously, if the Clarity system was configured to display edits on one of the video outputs, when the Graphic Edit window ⌐260¬ was closed, the last edited page was left displayed. The video output now returns to black when the Graphic Edit window is closed.
User Preferences dialog box ⌐809¬
    Edit dialog tab ⌐810¬
        Edit Output Channels group box ⌐812¬
	0487	Clarity, Clarity PREP ⌐52¬	7.1.1.6

4.1.1.2.9   7.1.1.7

The following new features were implemented in version 7.1.1.7 of the CG Tools software.

Description of feature	ID	Application	Version
Cel animation timeline information now maintained after updating page template field Previously, if you had inserted a cel animation that was referenced by a page template field using the CEL page template field update command ⌐476¬, any timeline settings that were configured for the cel animation were lost when the cel animation was changed after the page template field was updated. Cel timeline settings are now maintained (e.g. looping settings), thus ensuring that the new cel animation plays out in the same way as the older cel.	0488	Clarity, Clarity PREP ⌐52¬	7.1.1.7

4.1.1.2.10   7.1.1.8

The following new features were implemented in version 7.1.1.8 of the CG Tools software.

Description of feature	ID	Application	Version

Implemented a maximum limit to the number of Smart Cache entries
A maximum entry limit has been implemented to prevent the Smart Cache using up too much hard disk space.
Local Preferences dialog box ⌐696¬
    Caching dialog tab ⌐707¬
        Smart Cache dialog box ⌐708¬
	0480	Clarity, Clarity PREP ⌐52¬	7.1.1.8

Import subtitle functionality now features GBK encoded code page support
The Subtitling dialog box now features an option to import GBK encoded subtitle files. GBK is an extended multi-byte character encoding method used in Mainland China.
Subtitling dialog box ⌐803¬
    Options group box ⌐805¬
        GBK Encoded group box ⌐805¬
	0489	Clarity, Clarity PREP ⌐52¬	7.1.1.8

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version
Implemented the ability to select a different font when inserting a symbol On the Insert Symbol dialog box, the font for the selected text or character at the current cursor position is now indicated by the Font drop-down list box. If desired, select another font that contains the symbol that you want to insert. Insert Symbol dialog box ⌐675⌐ Font drop-down list box ⌐675⌐	0490	Clarity, Clarity PREP ⌐52⌐	7.1.1.8

Implemented improvements to Styles functionality in the CG Tools software
A number of improvements have been made to the way in which styles are displayed and used:
1. Implemented the concept of *User Defined Styles* and *Recent Styles.*
    Up to 16 recently used styles can be automatically stored, tracked and listed in order of use during text styling. Any user defined styles that have been recently used are shown.
    In addition, the CG Tools software automatically keeps track of changes made to settings on the Graphic Tools ⌐266⌐ with respect to text styling. A library of these changes for the current session is kept, thus enabling you to go back and re-style text using formatting characteristics that were previously configured, but were NOT explicitly stored as a user defined style. These styles remain unnamed, unlike user defined styles.
2. Implemented and updated a range of new tools on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐.
3. Implemented a new shortcut menu (see User Defined Styles shortcut menu) ⌐321⌐ that enables secondary access to functionality offered by the new tools on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐.
4. Implemented the ability to toggle the display of undefined user defined styles in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐. Available using the Filter Undefined Styles tool and shortcut menu command.
5. Style previews on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ now show autobox styling attributes correctly if they are configured for a style.
6. If a style uses a logo font, then these are NOT previewed in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐.
7. Implemented advanced styling functions including:
• *Define And Apply To Page* (as per the Define Style command, but additionally applies the new user defined style to the entire text page).
• *Define And Apply to All Pages* (as per the Define Style command, but additionally applies the new user defined style to all text pages).
• Define From Cursor (stores the properties of the text at the current text cursor position to the selected user defined style in the Preview list).
	0491
	0492
		Clarity, Clarity PREP ⌐52⌐	7.1.1.8

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Description of feature	ID	Application	Version
Implemented improvements to Logos and Logo Fonts functionality in the CG Tools software A number of improvements have been made to the way in which logos and logo fonts are displayed and used: 1. The operation of the Logos control tab [289] and Logo Fonts control tab [287] is now more consistent with the User Defined Styles (Styles) (Crop Styles) control tab [298]. 2. The selected logo font is now disassociated from the selected font in the text page, to allow logos to be inserted more easily. 3. Implemented and updated a range of new tools on the Logos control tab [289] and Logo Fonts control tab [287]. 4. Implemented a new shortcut menu (see Logos and Logo Fonts shortcut menu) [323] that enables secondary access to functionality offered by the new tools on the Logos control tab [289] and Logo Fonts control tab [287]. 5. Implemented the ability to toggle the display of undefined logos in the Preview list on the Logos control tab [289] and Logo Fonts control tab [287]. Available using the Filter Undefined Logos tool and shortcut menu command. 6. Using the Logos and Logo Fonts shortcut menu [323], logo fill mode settings can now be configured after a logo or glyph within a logo font has been specified. Replicates the existing functionality offered by the Logo Fill Mode group box [674] on the Insert Logo dialog box [673] and the Cutout mode group box [626] on the Edit Logo Character Glyph dialog box [626]. 7. Using the Logos and Logo Fonts shortcut menu [323], the fixed size setting can now be configured after a logo or glyph within a logo font has been specified. Replicates the existing functionality offered by the Fixed Size check box [674] on the Insert Logo dialog box [673] and the Fixed Size check box [626] on the Edit Logo Character Glyph dialog box [626]. 8. Using the Logos and Logo Fonts shortcut menu [323], the maintain aspect setting can now be configured after a logo has been specified. Replicates the existing functionality offered by the Maintain Aspect check box [674] on the Insert Logo dialog box [673].	0493	Clarity, Clarity PREP [52]	7.1.1.8

4.1.1.2.11   7.1.1.9

The following new features were implemented in version 7.1.1.9 of the CG Tools software.

Description of feature	ID	Application	Version
Implemented the ability to reset CG Tools GUI positioning Useful in situations where application windows are lost or columns have been resized, and they cannot be viewed unless registry settings or XML configuration files are changed. This action displays available GUI components within the viewable screen area. Window> [433] Reset Window Positions [433]	0476	Clarity, Clarity PREP [52]	7.1.1.9

Implemented new Text>Reverse Lines menu command
Available when two or more lines are selected. Reverses the position of the selected lines.
Text> [408] Reverse Lines [416]
Graphic Tools [266]
   Toolbar [315]
      Text Format tool box [320]
	0494	Clarity, Clarity PREP [52]	7.1.1.9

Implemented warning message if a page will not play out all clips Displayed when pages containing two video clips get cued on a channel with a single clip player assigned to it.	0495	Clarity, Clarity PREP [52]	7.1.1.9

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Application	Version

Implemented Cut Standard Move animation effect
There always has been a way of achieving a Cut effect, but this has been non-intuitive via the Standard Move [534] Wipe [535] effect, in conjunction with a cut direction. There is now a dedicated Standard Move Cut effect.
Standard Move [534]
    Descriptions
        Cut [534]
	0496	Clarity, Clarity PREP [52]	7.1.1.9

Implemented interactive resizing of logos within text pages
After a logo is selected, you can now resize the logo interactively using handles within the Graphic Edit window [260].
Graphic Tools [266]
    Control tabs [266]
        Logos control tab [289]
	0497	Clarity, Clarity PREP [52]	7.1.1.9

Implemented interactive configuration of A to B animation effects
To make configuration more consistent with animation mask editing, if an A to B move has been defined for a selected animation effect, you can now edit the start and end position of the A to B move interactively using handles within the Graphic Edit window [260].
Animation Marker dialog box [565]
    A to B check box and group box [567]
        X and Y check boxes and increment boxes [568]
	0498	Clarity, Clarity PREP [52]	7.1.1.9

Removed the Don't ask me again check box from the Select Page Paste Mode dialog box Select Page Paste Mode dialog box [798]	0500	Clarity, Clarity PREP [52]	7.1.1.9

4.1.1.2.12   7.1.2.0

No new features in this release.

4.1.1.2.13   7.1.2.1

The following new features were implemented in version 7.1.2.1 of the CG Tools software.

Description of feature	ID	Application	Version
Implemented that pages, when reverted to non-template page status, should have the read-only setting cleared as well When pages are set back to non-template status, the read-only setting that is automatically set in conjunction with the template setting is cleared as well, enabling pages to be subsequently edited. Page> [390] Template [394]	0507	Clarity, Clarity PREP [52]	7.1.2.1

4.1.1.3   Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content [68]
Corrections [68]

4.1.1.3.1   New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description
CG Tools and Clarity documentation resources `105` 　　Manuals and guides `105` What get's installed? `116` 　　Installation folder structure `116` 　　Program group structure `119`	Add information regarding the new location for documentation in the Start menu. Also added information regarding the new A3 keyboard shortcut guides available in Adobe Acrobat PDF format (see the bottom of this table).
Graphical User Interface (GUI) tour `245` 　Page Browser and Page List 　　Shortcut menu `256`	Documented shortcut menu available from the Page List `252` and Page Browser `251`.
Learn more about `440` 　Animation 　　Page transitional information `440` Page Settings dialog box `751` 　　Transition dialog tab `767`	Documented Split Horizontal page transition.
Cool Moves `462` Smart Moves `532`	Made Cool Move and Smart Move descriptions consistent with the new animations settings available on the Animation Marker dialog box `565`.
Menus `378` 　　Page `390` 　　　Clear Name `392`	Added Page>Clear Name command.
Page Settings dialog box `751` 　　Key / Matte dialog tab `763` 　　　Use key protect check/group box `764`	Removed Protect With Live Key radio button section as this control has now been removed from the CG Tools GUI.
User Preferences dialog box `809` 　　Edit dialog tab `810` 　　　Text Settings group box `814` 　　　　Use default font for all new graphic objects check box `815`	Documented the ability use the default font for all new graphics.
Supporting applications and tools `834` 　　Clarity Control Toolbox `836` 　　Clarity COM `1008` 　　Clarity XML Socket Server `1010`	Added documentation for the Clarity XML Socket Server, Clarity Control Toolbox and Clarity COM object.
CG Tools keyboard shortcut quick reference (all keyboards)	Added CG Tools keyboard shortcut quick reference (all keyboards) for the CG Tools online help which can be displayed using the Help> `434` Keyboard Shortcuts `435` command. Only available for online help. Also available as a PDF (see Keyboard_Shortcuts_H059W004 below).
Keyboard_Shortcuts_H059W004.pdf RAK1_Shortcuts_H059W004.pdf RAK2_Shortcuts_H059W004.pdf	Added A3 Keyboard Shortcut Quick Reference guides in PDF format. Installed with the CG Tools software and located in `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Documents.`

4.1.1.3.2   Corrections

The following corrections were added to this version.

Topic and sub topics	Description
N/A	Miscellaneous spelling and formatting corrections.
N/A	Bug fixes are now not features as part of the customer facing documentation.

4. CG Tools release notes

4.1.2   H059W004_Rev02_C, CG Tools version 7.1.0.8, 07/06/2006

Third draft release of revision two to coincide with the release of version 7.1.0.8 of the CG Tools software.

Known problems 69
New features 69
Updates to documentation not linked to current or previous releases 71

4.1.2.1   Known problems

None at time of release.

4.1.2.2   New features

The tables in subsequent sections highlight the new features implemented in each release.

7.1.0.7 69
7.1.0.8 69

4.1.2.2.1   7.1.0.7

No new features in this release.

4.1.2.2.2   7.1.0.8

The following new features were implemented in version 7.1.0.8 of the CG Tools software.

Description of feature	ID	Application	Version

Implmented the ability to toggle the display of digital clocks on and off
Digital clocks can now be configured with on and off trigger keys to enable the display of the clock to toggle whilst it is playing out. At present only a Cut transition is supported.
Graphical User Interface (GUI) tour 245
    Graphic Tools 266
        Control tabs 266
            Digital Clock Settings control tab 259
	0372	Clarity, Clarity PREP 52	7.1.0.8

Control tab headings now displayed in bold and black
All control tabs on the Graphics Tools are now displayed in bold and black instead of black and grey to improve readability.
Graphical User Interface (GUI) tour 245
    Graphic Tools 266
        Control tabs 266
	0380	Clarity, Clarity PREP 52	7.1.0.8

Implemented the ability to monitor progress of CG Tools software shut-down When a CG Tools software derivative shuts down there is quite a delay while this happens. A message now appears informing the user that the application is currently shutting down until the Clarity.exe thread has stopped functioning within Windows. Exiting the CG Tools software 375	0382	Clarity, Clarity PREP 52	7.1.0.8

Naming of Control tab headings improved to help user identification.
Graphical User Interface (GUI) tour 245
    Graphic Tools 266
        Control tabs 266
	0385	Clarity, Clarity PREP 52	7.1.0.8

Description of feature	ID	Application	Version

Solid edge effect now renamed as No Edge Effect where relevant on the CG Tools GUI
More meaningful to users.
Graphical User Interface (GUI) tour `245`
   Graphic Tools `266`
      Control tabs `266`
         Edge Effects control tab `281`
      Static control area `300`
         \<edge effect\>\<foreground/edge/shadow colour selector\> `302`
Edge Effects `470`
   No Edge Effect `474`
	0386	Clarity, Clarity PREP `52`	7.1.0.8

Solid shading now renamed as No Shading where relevant on the CG Tools GUI
More meaningful to users.
Graphical User Interface (GUI) tour `245`
   Graphic Tools `266`
      Control tabs `266`
         Colour control tab `277`
Graphic planes and shading types `498`
   Graphic planes `498`
   Shading types `499`
	0387	Clarity, Clarity PREP `52`	7.1.0.8

Implemented the ability to float the User Defined Styles control tab, Logos control tab and Logo Fonts controls tab as a single tabbed control box
Enables the user to freely manipulate how they want to display user defined styles, logos and logo fonts. Replicates the same GUI as featured on the respective control tabs on the Graphic Tools.
Graphical User Interface (GUI) tour `245`
   Graphic Tools `266`
      Control boxes `326`
         Styles/Logos control box `351`
Graphical User Interface (GUI) tour `245`
   Graphic Tools `266`
      Control tabs `266`
      Logo Fonts control tab `287`
      Logos control tab `289`
      User Defined Styles control tab `298`
	0388	Clarity, Clarity PREP `52`	7.1.0.8

Custom Animation folders now restricted as Windows hidden folders by CG Tools software After the implementation of a Custom Animation folder on a per job basis in 7.1.0.6 `76`, it was decided subsequently that this folder should remain hidden, thus only permitting the editing of custom animations via the CG Tools user interface.	0389	Clarity, Clarity PREP `52`	7.1.0.8
Custom Animation folders are only created if a job features custom animations After the implementation of a Custom Animation folder on a per job basis in 7.1.0.6 `76`, a Custom Animation folder is only created under the parent job folder if the job contains custom animations.	0390	Clarity, Clarity PREP `52`	7.1.0.8

Selecting an edge effect indirectly now results in the auto-selection of the Edge Effect control tab
To improve usability, after selecting an edge effect using the \<edge effect\>\<foreground/edge/shadow colour selector\> control set on the Graphic Tools, the Edge Effect control tab is automatically selected to enable configuration of the selected edge effect.
Graphical User Interface (GUI) tour `245`
   Graphic Tools `266`
      Static control area `300`
         \<edge effect\>\<foreground/edge/shadow colour selector\> `302`
	0391	Clarity, Clarity PREP `52`	7.1.0.8

Description of feature	ID	Application	Version

Foreground, Edge, Background selection now via radio buttons
To improve usability on the Colour tab on the Graphics Tools, the previous Graphics Plane drop-down list box has been replaced with separate Foreground, Edge, Background radio buttons.
Graphical User Interface (GUI) tour [245]
    Graphic Tools [266]
        Control tabs [266]
           Colour control tab [277]
	0392	Clarity, Clarity PREP [52]	7.1.0.8

Video grab button now resident again on the Graphic Tools toolbar
Re-instated due to customer request.
Graphical User Interface (GUI) tour [245]
    Graphic Tools [266]
        Toolbar [315]
Menus [378]
        Background> [419] Grab Video Frame [420]
	0397	Clarity, Clarity PREP [52]	7.1.0.8

Job Fonts folder now assigned as Windows hidden folders The `Job Fonts` folder created on a per job basis inside the root of the folder containing the job is now marked as a Windows hidden folders and thus will not be visible unless hidden folders are displayed.	0408	Clarity, Clarity PREP [52]	7.1.0.8

Autosave .PAS and .BAK files are now assigned as Windows hidden files.
Getting started [114]
    Basic level configuration and system test [122]
        Optional software configuration that maybe useful [126]
           Automatically saving jobs [126]
User Preferences dialog box [809]
    General dialog tab [816]
        Auto Saving group box [816]
	0409	Clarity, Clarity PREP [52]	7.1.0.8

4.1.2.3   Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content [71]
Corrections [73]

4.1.2.3.1   New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description

Dialog boxes [554]
    Local Preferences dialog box [696]
        Default Global Custom Animations Folder group box [716]
    Job Preferences dialog box [679]
        General dialog tab [680]
           Global Custom Animations Folder group box [682]
    Export/Import Custom Animations dialog box [631]
    Animation Marker dialog box [565]
    Changes to custom animation implementation for CG Tools version 7.1.0.6 [465]
	Documented new custom animation system implemented in 7.1.0.6 [76]. Also removed documentation for the Custom Animation dialog box that was available from the Timeline. The new functionality on the Animation Marker dialog box takes the place of the previous Custom Animation dialog box.

Getting Started [114]
    Keypads [21]
        Requirements [215]
        Important information and tasks [215]
        Example A: Installation of Version 2 RapidRecall keypad for use over ethernet networks using static IP address [216]
	Documented second example installation of a Version 2 RapidRecall keypad (PP8111 [30]) onto an ethernet network using a static IP address.

Topic and sub topics	Description
Getting Started 114 　　Graphical User Interface (GUI) tour 245 　　　　Graphics Tools 266 　　　　　　Toolbar 315 Menus 378 　　Graphics 395 　　　　Graphic Mode 　　　　　　Autobox Style 399	New Autobox Style button.
Graphical User Interface (GUI) tour 245 　　Graphic Tools 266 　　　　Control tabs 266 　　　　　　Cel Playback Settings (Cel) 274	Documented the availability of the Advanced Loop/Pause button.
Learn more about 　　Graphic planes and shading types 498 　　　　Graphic planes 498 　　　　Shading types 499	Documented graphic planes and shading types.
Dialog boxes 554 　　Merge Video With Key dialog box [CLARITY] 736 　　　　Destination Clip group box 737 　　　　　　Shaped video radio button 737 　　　　　　Unshaped video radio button 737	Completed documentation for Shaped video and Unshaped video radio button. Previously un-documented.
Dialog boxes 554 　　Local Preferences dialog box 696 　　　　Rack dialog tab 724	Updated information to match Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G).
Dialog boxes 554 　　Subtitling dialog box 803 　　　　Options group box 805 　　　　　　Big5 Mixed-Byte Encoded check box 805	Documented use of Big5 Mixed-Byte Encoded subtitle files.
Dialog boxes 554 　　Job Preferences dialog box 679 　　　　General dialog tab 680 　　　　　　Auto prepare next page check box 681 　　　　　　　　Auto prepare next after stop command check box 681 　　　　　　Auto sequence pages check box 681 　　　　　　　　Update entire sequence on remote update command check box 682	Documented the Auto prepare next after stop command job preference. Also changed the hierarchy to match the availability on the General dialog tab.
Supporting applications and tools 834 　　RapidRecall Keypad Server 1025 　　　　Description of the RapidRecall Keypad Server GUI 1026 　　　　　　Network mode 1026 　　　　RapidRecall Keypad Server shortcut command line switches 1027 　　RapidRecall Virtual Keypad 1030 　　　　Keypad layout 1031 　　　　Limitations 1031 　　　　Terms and definitions 1031 　　　　Example A - Installation of the RapidRecall virtual keypad for use over ethernet networks 1031 　　　　RapidRecall virtual keypad configuration (Virtual Keypad.exe.config) 1044 　　　　Description of keypad keys 238 　　　　Description of keypad operating mode displays and channel status 240	Created a new section where future tools and applications that support the CG Tools software can be documented.

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

4.1.2.3.2 Corrections

The following corrections were added to this version.

Topic and sub topics	Description
N/A	Miscellaneous spelling and formatting corrections.

4.1.3 H059W004_Rev02_B, CG Tools version 7.1.0.6, 13/04/2006

Second draft release of revision two to coincide with the release of version 7.1.0.6 of the CG Tools software.

Known problems 74
New features 74
Updates to documentation not linked to current or previous releases 77

4.1.3.1 Known problems

None at time of release.

4.1.3.2 New features

The tables in subsequent sections highlight the new features implemented in each release.

7.1.0.1 74
7.1.0.2 74
7.1.0.3 74
7.1.0.4 75
7.1.0.5 76
7.1.0.6 76

4.1.3.2.1 7.1.0.1

The following new features were implemented in version 7.1.0.1 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
New features added to dongle VTR Control is now available as an option on CG derivatives as well as being standard on GX derivatives. Optional licensed features and other product options available for one or more products or derivatives 13 VTR control 35	0345	■		

4.1.3.2.2 7.1.0.2

The following new features were implemented in version 7.1.0.2 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Fonts now automatically installed when a job is loaded via automation Previously, you were only permitted optionally install fonts if you manually loaded a job. Now, when jobs are loaded via the automation interface that require fonts to be installed , the required fonts are installed automatically.	0347	■		

4.1.3.2.3 7.1.0.3

The following new features were implemented in version 7.1.0.3 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   74

Copyright © 2000-2006 Pixel Power Ltd.

Description of feature	ID	Feature available in selected software derivative		
When using a Version 2 RapidAction keyboard, LED usage can now be selected based on a set of circumstances. Select Direct connection if you have connected the keyboard directly to the system unit, KVM Extended if you have connected the keyboard via an extender, KVM Switch if you have connected the keyboard via a switch. To configure LED usage manually, select the Custom option. Local Preferences dialog box 696 Keyboard dialog tab 718 Keyboard Type and specific keyboard options 720	0350	■	■	
Improved interpretation of selected layer The Select Graphic drop-down list box on the Graphic Tools toolbar now shows that nothing is selected if indeed that is the case within the Graphic Edit window. This is indicated by the "No Graphic Selected" option. Also, enables a foreground layer to be selected, even if nothing is currently selected. Graphical User Interface (GUI) tour 245 Graphics Tools 266 Toolbar 315	0352	■	■	

4.1.3.2.4   7.1.0.4

The following new features were implemented in version 7.1.0.4 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Improvements made to page naming Longer page names can now be used (previously restricted to 32 characters) (see Page variables shown by Page Browser and Page List) 253. Page names are now protected from being edited when the page is set as read only (Page> 390 Foreground Options>Read Only 393). Markers are NOT included in automatically generated page names (previously the [] character was included to represent markers).	0355	■	■	
Unique field marker ID's are now forced across all text pages on the same page Previously, you could have page template field markers with duplicate ID's on multiple text pages which could cause some confusion during editing. Now when inserting page template field markers, unique field marker IDs are now forced across multiple text pages contained on the same page. Graphic Tools 266 Controls tabs 266 Field Settings (Field) 283	0357	■	■	
Progress bar implemented when fields are updated during job load Provides meaningful representation of progress when loading jobs that contain fields which are linked to external data sources.	0358	■	■	
Implemented option to automatically select the current cued page whilst playing out online In addition to keeping the cued page in view (Keep Online Cued Page Visible check box 678 on the Job List View - Display Options dialog box 677), you can now choose to auto-select the cued page using the Auto Select Online Cued Page check box 678, making it easy to use the arrow keys to select a neighbouring page if required.	0360	■	■	

Description of feature	ID	Feature available in selected software derivative		
Implemented Layer Tree control box Lists all page elements contained on the page currently open for editing in the Graphic Edit window. The order of page elements shown by the Layer Tree control box is a direct representation of how the elements are layered on the page. Also implemented the ability to reverse the order of page elements in the layer tree. Graphic Tools 266 　　Toolbar 315 Control Boxes 326 　　Layer Tree 341 Menus 378 　　View(Job) 421 　　　　Edit View>Layer Tree 423 User Preferences dialog box 809 　　Edit dialog tab 810 　　　　Layer Tree group box 813	0361	■	■	
Implemented the ability to specify the start time for stopwatches Enables an easier way of typing in the start time for stopwatches and global stopwatches. Graphic Tools 266 　　Controls tabs 266 　　　　Digital Clock Settings (Clock) control tab 280	0362	■	■	
Implmented the ability to lock all text styles Disables renaming, deleting or setting of any style. Graphic Tools 266 　　Controls tabs 266 　　　　User Defined Styles (Styles) control tab 298	0363	■	■	
Implmented the automation of auto set page name functionality You can now optionally set whether or not to create the page name from the first text page. If this function is turned on, then the page name will be updated when the page is saved or stored. User Preferences dialog box 809 　　General dialog tab 816 　　　　Page Naming group box 818	0364	■	■	
Page and page/frame numbers can now be appended automatically to image sequence filenames Page numbers are now automatically included in filenames when pages are rendered to a file. Export Pages dialog box 635 　　Filename Rule group box 636 Control Boxes 326 　　Playout File Output 347 　　　　Include options 348	0365	■	■	
Implemented the ability to save and print an entire job maintenance report You now have the option of either printing a summary report or a complete report. Also the same when saving a report. Job Maintenance dialog box 686	0366	■	■	

4.1.3.2.5   7.1.0.5

No new features in this release.

4.1.3.2.6   7.1.0.6

The following new features were implemented in version 7.1.0.6 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   76

Copyright © 2000-2006 Pixel Power Ltd.

Description of feature	ID	Feature available in selected software derivative		
Implemented the ability to make the forcing of unique field marker ID's optional (see 0357) Unique field marker IDs are can now be optionally forced across multiple text pages contained on the same page. User Preferences dialog box [809] Edit dialog tab [810] Field Marker ID's group box [813] Enforce unique Field IDs across all Text Pages within a Job Page check box [813]	0368	■	■	
Edit Mode toolbox now permanently displayed in vertical form Previously, the Edit Mode tools were part of a toolbox which meant that the toolbox had to be opened in order to both see the current edit mode and select another mode if required. The tools have now been moved to a permanent vertical location on the left-hand side of the Graphics Tools. Graphics Tools [266] Toolbar [315]	0369	■	■	
HTMLHelp file now functions independently of CG Tools software Now enables unrestricted movement between the HTMLHelp file and the CG Tools application.	0370	■	■	
Implemented the ability to select which columns are displayed in the Page List in the Job Edit window To improve the display rate of large numbers of pages in the page List, you can now optionally choose to display or hide columns. Job List View - Display Options dialog box [677] Columns to show group box [677]	0371	■	■	
Implemented the ability to maintain the full job path in a saved job package Previously, when a job package was created, the job was always placed at the top level of the package (folder level) to make it easier to find when passing the package around. You now have the option to keep the job file in the same folder path as it was in the source location. Copy Clarity Job dialog box [605] Package dialog tab [614] Destination Package Settings group box [615] Maintain full job path in package check box [616]	0373	■	■	
Implemented new Custom Animation system Will be documented fully in the next release of H059W004. As brief guide, see Changes to custom animation implementation for CG Tools version 7.1.0.6 [465].	N/A	■	■	

4.1.3.3   Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content [77]
Corrections [78]

4.1.3.3.1   New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description
About current CG Tools products [7] Optional licensed features and other product options available for one or more products or derivatives [13]	Revised product options to feature Clarity 3000, along with new part numbers that were previously un-allocated.

Topic and sub topics	Description

Getting Started [114]
    Keypads [211]
        Version 2 RapidRecall keypad (current) [211]
            Package contents [212]
            Required host system software versions [212]
            Specification [213]
            Example installation of Version 2 RapidRecall keypad for use over ethernet networks [228]
            Description of the RapidRecall Keypad Server GUI [1026]
            Description of keypad keys [238]
            Description of keypad operating mode displays and channel status [240]
            RapidRecall Keypad Server shortcut command line switches [1027]
            More information regarding other installation configurations [243]
	New information regarding Version 2 RapidRecall keypad (PP8111 [30]). Includes documented example installation onto an ethernet network using DCHP IP address allocation.

Keyboard/Video/Mouse (KVM) extenders and switches [209]
    Supported KVM extenders [209]
    Lindy KVM extender and switch usage guidelines [210]
	Added information regarding supported KVM extenders.

Menus [378]
    View(Job) [42]
    Toolbars
        Language Bar [427]
	Added missing menu command.

Appendices [1054]
    DCOM configuration
        Configuring DCOM access through firewalls (OPTIONAL) [1059]
	New information regarding the configuration of DCOM access through firewalls.

4.1.3.3.2   Corrections

The following corrections were added to this version.

Topic and sub topics	Description
N/A	Miscellaneous spelling and formatting corrections.

4. CG Tools release notes

4.1.4 H059W004_Rev02_A, CG Tools version 7.1.0.0, 07/02/2006

First draft release of revision two to coincide with the release of version 7.1.0.0 of the CG Tools software.

4.1.4.1 Known problems

None at time of release.

4.1.4.2 New features

The tables in subsequent sections highlight the new features implemented in each release.

4.1.4.2.1 7.0.2.3

The following new features were implemented in version 7.0.2.3 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Implemented request for font character heights greater than 512 Available for all text and clock elements.	0297 0296	■	■	
Implemented logging to the remote clip interface New `ClipInterface` folder and subsequent log file created when requested by the system. Appendices　1054 　　CG Tools application logs　1055	0301	■	■	
Log name now included in debug log filenames Makes it easier to tell which log file you are looking at when multiple files are open during a session. Appendices　1054 　　CG Tools application logs　1055	0303	■	■	
Clarity COM connections now use shorter network timeout Previously when accessing other Clarity machines over the COM connection, it used the very long Microsoft Windows timeout which resulted in long Server Busy messages when browsing remote machines using the Clarity Explorer　362. We have now implemented our own shorter timeout for remote connections.	0305 0308	■	■	
Clarity servers now marked as disconnected on COM timeouts If a COM connection timeout occurs, the server is now marked as disconnected so that a new connection can be attempted if required.	0306 0309	■	■	

4.1.4.2.2   **7.0.2.4**

No new features in this release.

4.1.4.2.3   **7.0.2.5**

No new features in this release.

4.1.4.2.4   **7.0.2.6**

The following new features were implemented in version 7.0.2.6 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Implemented new update field command to add video clips and associated audio When adding a background video clip by updating a page background field, the current `VID` command only handles video clips and ignores associated audio. You can now add video AND associated audio to the page background audio timeline using the new `V+A` command. Page background field update commands 477	0326 0327	■	■	

4.1.4.2.5   **7.0.2.7**

No new features in this release.

4.1.4.2.6   **7.0.2.8**

No new features in this release.

4.1.4.2.7   **7.0.2.9**

The following new features were implemented in version 7.0.2.9 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Fonts now automatically installed when a job is loaded via automation Previously, you were only permitted optionally install fonts if you manually loaded a job. Now, when jobs are loaded via the automation interface that require fonts to be installed , the required fonts are installed automatically.	0346	■		

4.1.4.2.8   **7.0.3.0**

The following new features were implemented in version 7.0.3.0 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Feature available in selected software derivative		
When using a Version 2 RapidAction keyboard, LED usage can now be selected based on a set of circumstances. Select Direct connection if you have connected the keyboard directly to the system unit, KVM Extended if you have connected the keyboard via an extender, KVM Switch if you have connected the keyboard via a switch. To configure LED usage manually, select the Custom option. Local Preferences dialog box [696] Keyboard dialog tab [718] Keyboard Type and specific keyboard options [720]	0348	■	■	
Improved interpretation of selected layer The Select Graphic drop-down list box on the Graphic Tools toolbar now shows that nothing is selected if indeed that is the case within the Graphic Edit window. This is indicated by the "No Graphic Selected" option. Also, enables a foreground layer to be selected, even if nothing is currently selected. Graphical User Interface (GUI) tour [245] Graphics Tools [266] Toolbar [315]	0351	■	■	
Implemented a fix to release memory allocated whilst loading a cel animation files if the system runs out of memory while loading the file.	N/A	■		

4.1.4.2.9   7.0.3.1

The following new features were implemented in version 7.0.3.1 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Implemented the ability to save and print an entire job maintenance report You now have the option of either printing a summary report or a complete report. Also the same when saving a report. Job Maintenance dialog box [686]	0325	■	■	
Progress bar implemented when fields are updated during job load Provides meaningful representation of progress when loading jobs that contain fields which are linked to external data sources.	0358	■	■	

4.1.4.2.10   7.0.3.2

No new features in this release.

4.1.4.2.11   7.0.3.3

No new features in this release.

4.1.4.2.12   7.0.3.4

No new features in this release.

4.1.4.2.13   7.0.3.5

No new features in this release.

4.1.4.2.14   7.1.0.0

The following new features were implemented in version 7.1.0.0 of the CG Tools software.

Description of feature	ID	Feature available in selected software derivative		
		Clarity	PREP	Plugin
Implemented restructuring of user and system preferences There are now three different categories for CG Tools software preferences. Preferences are configured on three separate dialog boxes. These three dialog boxes replace the previous User Preferences dialog box and the System Settings dialog box. Options> 429Preferences>Global Preferences 430 Global Preferences dialog box 654 Options> 429Preferences>User Preferences 430 User Preferences dialog box 809 Options> 429Preferences>Local Preferences 430 Local Preferences dialog box 696	N/A	■	■	
Implemented new CG Tools user management system A new methodology has been introduced that has enabled us to migrate the CG Tools software to a user based software system. Introduced in version 7.1.0.0. In short, the system enables the creation and maintenance of user accounts and user account information to be stored in a centralised network repository. The entire new system of user and system management utilises XML and text files as the storage medium for user account and software preference information. The user management functionality supersedes the system that was previously configured using the Password dialog tab on the System Preferences dialog box. Intermediate level CG Tools user management, Clarity Server and job copy configuration (7.1.0.0) 128 Global Preferences dialog box 654 Users dialog tab 665 User Preferences dialog box 809 Password dialog tab 823 Add/Edit User dialog box 560 Clarity Log In dialog box 595 Clarity Log Out dialog box 596	N/A	■	■	
Implemented global clock ID and restart capability for Global Stopwatch clocks You can now assign an ID to Global Stopwatch clocks using the Global Stopwatch ID increment box. You are then able to see at a glance when editing clocks which global clocks are linked. You can also define that the selected clock is restarted when it is encountered during playout using the Restart box in the Trigger group box. Graphic Tools 266 Control tabs 266 Digital Clock Settings (Clock) 280	N/A	■	■	
Implemented changes to auto saving functionality Auto save files for job files (.PPJ) now have the .PAS file extension. These files can now be optionally deleted when the originating job file (.PPJ) is saved. User Preferences dialog box 809 General dialog tab 816 Auto Saving group box 816 Delete auto save file after manual save check box 816 On check box 816 Basic level configuration and system test 122 Optional software configuration that maybe useful 126 Automatically saving jobs 126	N/A	■	■	

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Feature available in selected software derivative		
Implemented disabling of the software preview channel (UI channel) The software preview channel (UI channel) is now enabled by default. In circumstances where your system is unable to support playback on the software preview channel (due to the performance of the systems' graphics card), you can disable playback on the software preview channel so that the possible warning message is not displayed inadvertently. User Preferences dialog box [809] General dialog tab [816] Software Preview Channel group box [818] Disabled check box [818]	N/A	■	■	
Implemented the ability to connect to a Clarity Server from the Clarity Explorer You can now connect to a known Clarity Server listed in the Clarity Explorer using a right-click shortcut menu. Clarity Explorer [362] Graphical User Interface (GUI) [364] Location tree [364] Available locations, colour coding of locations and location status [365] Shortcut menus [367] Location tree shortcut menu [367]	N/A	■	■	
3D DVE's now run slightly faster Implemented optimisations to enable 3D DVE's to run a few percent faster, thus enabling more graphics to co-exist on a page, or to allow successful playback at awkward angles.	0292	■	■	
Log file names now included in log file filename To make it easier to keep track of which log file you are looking at when you have multiple files open at the same time. Supported also by the Pixel Power Control Centre (0294) and ENPS Active X control (0295). Appendices [1054] CG Tools application logs [1055]	0293 0294 0295	■	■	
Implmented the ability to set the minimum datastore data level using the Automation control tab The minimum datastore level was previously stored in the registry. Local Preferences dialog box [696] Automation dialog tab [704] Minimum Datastore Data Level increment box [706]	0298	■	■	
Implmented the ability to convert Clarity audio clips to Windows Audio Files (.WAV) Using the Clarity Explorer [362], copying and pasting audio clips from a clip drive to a PC drive now gives the option of pasting as a WAV file (as well as a .PPA file). Paste Audio Clip As dialog box [770]	0300	■	■	
Implemented QuickLoads feature This mechanism enables jobs to be loaded after pressing a specific key or by selecting an entry in the File> [378] Local QuickLoads [383] menu or File> [378] User QuickLoads [383]. Due to the implementation of new user preferences distribution (both for the local machine and on a user specific basis). Getting Started [114] QuickLoads [175] Local QuickLoads [175] User QuickLoads [175] QuickLoad example [175] Assigning QuickLoad keys [175] User Preferences dialog box [809] User QuickLoads dialog tab [821] Local Preferences dialog box [696] Local QuickLoads dialog tab [722]	0310	■	■	

Description of feature	ID	Feature available in selected software derivative		
Implemented the availability of field markers for use with text lines and text splines You can now link a text line and text spline object to a global field marker enabling the element to be linked to a global field and populated remotely. This function has been made available by implementing support for the Automation (Auto.) control tab [270] when a text line or text spline object is selected in the Graphic Edit window [260]. Has the following limitations: 1. The field marker will apply to the whole line of text. 2. The field marker will be defined in the same way as for non-text page graphics and not by inserting a field marker within the text stream. 3. No support for justification or case change (as yet). 4. Initially the field will not update while a page is live on-air, but only when the page is created/prepared.	0313	■	■	
Implemented support for unpacking and loading of jobs from zipped up job packages from within Clarity Enables the unpacking of job created using the Package dialog tab [614] on the Copy Clarity Job dialog box [605]. File> [378] Unpack Job From Zip [381] Unpack Job From Zip Archive dialog box [808]	0314	■	■	
Cel animation timing now available for configuration using new Cel Animation/Video Clip Playout dialog box Now available in a similar fashion to the control and configuration of video clips. Also implemented trigger keys for looping and pause events for both cel animations and video clips. The Cel Animation Playout dialog box can be displayed by selecting the Advanced Loop/Pause button on the Cel Playback Settings (Cel) control box [274]. This dialog box replaces the previous Video Clip Playout dialog box as functionality is identical when either a cel animation or clip is selected. Cel Animation/Video Clip Playout dialog box [587]	0315	■	■	
Enabled the editing of animation marker off move masks within the Graphic Edit window Previously, only masks for the off move could be edited interactively within the Graphic Edit window [260]. Now, if there is an off move mask defined using the Mask group box [572] on the Animation Marker dialog box [565], you can edit this mask interactively in the same way. The way in which animation masks can be configured interactively has also been improved using new buttons that appear within or alongside the mask, enabling the selection of the desired mask for configuration.	0316	■	■	
Colour of page status now green whilst online You can now configure separate colours for the display of On-Air pages (A1, A2) as well as cued pages (C1, C2 etc). Graphical User Interface (GUI) tour [245] 　Job Edit window [250] 　　Configuring the look of the Job Edit window [257] 　　　A guide to how page status is displayed [257] Job List View - Display Options dialog box [677] 　　Online Status colour selection boxes [678]	0320	■	■	
Missing files warning now visible when conducting job maintenance Due to the fact that you may need to scroll down to see some missing file types on the Summary dialog tab on the Job Maintenance dialog box and thus overlook the fact that there are missing files, we have implemented a warning at the top of the Summary dialog tab in the HTML report. Job Maintenance dialog box [686] 　Summary dialog tab [691]	0328	■	■	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　84

Copyright © 2000-2006 Pixel Power Ltd.

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Description of feature	ID	Feature available in selected software derivative		

Replicated Cutout tool
Previously the Cutout tool ONLY resided in the Shape tool box in Graphic Tools toolbar. It is now also present in the Cel and Clip toolbox.
Graphics Tools [266]
    Toolbar [315]
        Cel and Clip toolbox [317]
	0331	■	■	

Changed Invalid Content error to Aspect Ratio Mismatch error If you try to playout a page that has a different aspect ratio to the playout channel, you will get the "No valid content exists at requested index #" playout error. This error message now reads as "Aspect Ratio Mismatch".	0332	■	■	

Implemented the ability to change job/package name when copying a job or job package
You can now change the job name for the destination job when you complete a basic and package job copy.
Copy Clarity Job dialog box [605]
    Basic dialog tab [612]
        Copy Job As text box [613]
    Package dialog tab [614]
        Package Job As text box [616]
	0333	■	■	

Implemented additional method of setting page to Scroll Lock
In addition to the Page> [390] Foreground Options>Scroll Lock [394] command, you can also set the current page to scroll lock using the Graphic Tools.
Graphic Tools [266]
    Control tabs [266]
        View control tab [300]
	0334	■	■	

Implemented automatic switching between Edit/Prog and Timecode/Subtitle page modes for Clarity Plugin.	0335 0336			■

Implemented the saving of jobs automatically on every page update
Previously, the Save On Update option only automatically saved the job when the Graphic Edit window [266] was closed (if you were working in single page job mode). This option now also automatically saves the current job after page updates, even when in normal job mode. The job is automatically saved each time a page is updated to the directory specified.
User Preferences dialog box [809]
    Edit dialog tab [810]
        Edit Mode group box [812]
            Save on update check box [812]
	0337	■	■	

Implemented additional control over the page pasting operations
Enables clear decision making on how and where pages are pasted within the Page Browser/Page List.
User Preferences dialog box [809]
    Edit dialog tab [810]
        Default Page Paste Mode group box [811]
Select Page Paste Mode dialog box [798]
Edit> [384] Paste [386]
Shortcuts for use when the Job Edit window is selected [201]
Standard toolbar [247]
	0339	■	■	

Implemented option to break all links to Global Fields on pages Implemented the option to break all links to global fields on a page. This is so that you can setup a page using a linked Microsoft Excel spreadsheet that supplies data to global fields, then subsequently break links to the spreadsheet, save the page and copy it to another page, whilst maintaining global field data. Page> [390] Break Links to Global Fields [394] Field Data Connection Settings (Data) control tab [281]	0340	■	■	

4.1.4.3   Updates to documentation not linked to current or previous releases

The following sections detail updates to documentation that are not linked to current or previous releases.

New content 86
Corrections 86

4.1.4.3.1   New content

The following new content was added to this version. These are usually changes to the documentation that were not initiated by a bug report or feature request. Content may also be added due to new feature implemented in a previous release of the software that was unintentionally missed during the documentation schedule.

Topic and sub topics	Description

What get's installed? 116
    Installation folder structure 116
    Program group structure 119
	Updated what gets installed.

CG Tools application logs 1055	Updated CG Tools application logs.

Animation Marker dialog box 565
    Loop check box and group box 571
        Refresh on take check box 572
	Enables the animations' data to be updated to feature the latest data supplied via an associated page template field marker when the page is taken

Local Preferences dialog box 696
    Automation dialog tab 704
        Allow Automation Of Software Playout Channel group box 705
            Map To Channel increment box 705
	Enables an automation system to control the software playout channel and the channel mapping to be defined.

Local Preferences dialog box 696
    Automation dialog tab 704
        Log playback events against timecode check box 706
	To aid fault finding; enables the logging of playback events that are actioned against timecode.

Job List View - Display Options dialog box 677 Keep Online Cued Page Visible check box 678	Enables cued pages to be always visible in the Page List 252/Page Browser 251.

Get/Put Clip dialog box [CLARITY] 646
    Channel Width text box 648
    Auto Edit check box 649
    Auto Increment Numbers check box 650
    Clip Offset increment box 650
	Added missing information for these features.

4.1.4.3.2   Corrections

The following corrections were added to this version.

Topic and sub topics	Description
N/A	Miscellaneous spelling and formatting corrections.

4. CG Tools release notes

CG Tools versions 7.0.2.3 to 7.1.2.1

Section 5

Using this documentation and
other support resources

5. Using this documentation and other support resources

The topics in this section provide information on:

- [about CG Tools online help](#) 90;
- [accessing online help](#) 92 whilst using the CG Tools software;
- how to use [online help](#) 95;
- the availability of [Pixel Power Technical Support](#) 103;
- available [CG Tools and Clarity documentation](#) 105;
- [Pixel Power's internet](#) 107 presence and how it can help you.

5.1 About CG Tools online help

The online help system enables you to retrieve all the information you need quickly, and then return to your work. Help appears in a separate window on your screen called the Help Viewer.

SEE ALSO

[Structure and windows](#) 90
[Navigation](#) 91

5.1.1 Structure and windows

For quick access, you can keep the Help Viewer displayed on top of the CG Tools application. You can also print specific topics from the online help system. Whilst working with the Help Viewer, additional secondary topic windows may appear, depending on the type of information you have selected to view.

Help viewer (main topic window)   **Secondary topic window**
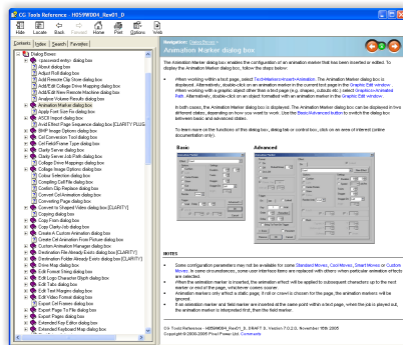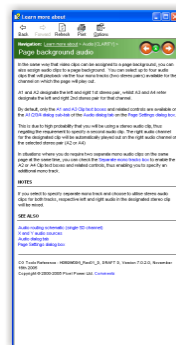
The main Help Viewer window and all secondary windows have a colour coded title areas to indicate the type of information displayed in the window. The table below shows the different topics available:

Title/Window colour	Contains
Dark Blue/White	Information regarding [new features](#) 38 and [release notes](#) 52.
Brown/White	Information about [menus](#) 378.
Blue/White	General information and [dialog box information](#) 554.
Green/White	[Learn more about](#) 440 about particular broadcast industry themes or technology or technical information on the software functionality or hardware platforms. Also [hints and tips](#) 830 on operational usage.
Dark Grey/White	Diagrams and images including charts, schematics and illustrations.
Light Grey/White	Glossary entries.
Olive/White	Information on using the [Help Viewer](#) 95.

SEE ALSO

5.1.2   Navigation

You can navigate using the "breadcrumb trail" of navigation links back to topics above the current topic in the table of contents. This can be useful as it shows where you are, even when the table of contents is not visible.
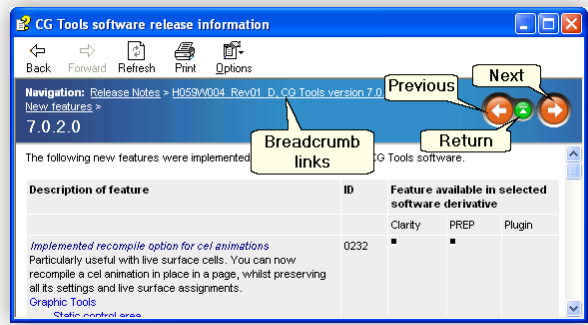
You can also navigate back and forth through topics use the orange Previous and Next buttons. The green Return button takes you back to the parent topic.

SEE ALSO

5.1.3   Highlighting topics that have changed since the previous release

Topics and sections that are new or that have been updated since the previous release of the documentation are shown by the use of highlighted icons in the table of contents.

Icon	Status
	New/updated section containing one or more new/updated topics
	New/updated topics

5.2 Accessing help information whilst using the CG Tools software

The online help can be accessed in a number of ways from the CG Tools software: either from the Help menu [93], using the Context sensitive help [92] or from dialog boxes. [92]

5.2.1 Context sensitive help

Context sensitive help mode enables the display of information that is relevant to the current status of the CG Tools application and provides information about using commands. You can access context sensitive help from the menus and toolbars.

The most common ways to access context sensitive help are as follows:

User Interface	Method	Possible Actions	Tool
Menu commands [378]	A	Select on the What's This? tool on the Standard toolbar [247], then select a menu command.	
	B	Select Help> [434] What's This? [434], then select a menu command.	
Tools on the Standard toolbar [247], Job/Page toolbar [248], Foreground toolbar [256], Transition toolbar [257] and toolboxes on the Graphic Tools [266] toolbar [315].	A	Select the What's This? tool on the Standard toolbar [247], then select the tool or toolbox for which you want help. If the tool has an equivalent menu command, help for the relevant menu command will be displayed; otherwise help for that toolbar or tool box will be displayed.	
	B	Select Help> [434] What's This? [434], then select the tool for which you want help.	
Control tabs [266] on the Graphic Tools [266].	A	Select the control tab for which you want help, select the What's This? button on the Standard toolbar [247], then select the control tab.	
	B	Select the control tab for which you want help, select Help> [434] What's This? [434], then select the control tab.	
Static control areas [300] on the Graphic Tools [266].	A	Click on the What's This? button on the Standard toolbar [247], then select the static control area.	
	B	Select Help> [434] What's This? [434], then select the static control area.	

Context sensitive help is also available for main windows and control boxes listed in the View [421] menu. With a main user interface window or control box selected, press F1.

 SHIFT + F1
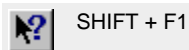
NOTE

The context sensitive pointer will stay active until you click away from a menu, tool or control on another part of the user interface.

SEE ALSO

Help> [434] What's This? [434]

5.2.2 Dialog box help

Whilst a dialog box is open when using the CG Tools software, if you want to receive information about the entire dialog box, click on the Help button (if available) at the bottom of the dialog box or press F1.

NOTES

Not all dialog boxes include dialog box help.

5.2.3   Help menu

There are a number of commands in the Help menu ⌐434⌐ which enable you to access help in a number of ways.

- the What's New? ⌐434⌐ command displays the Help Viewer showing a list of new features for the current installed version;
- the Contents and Index ⌐434⌐ command displays the Help Viewer;
- the What's This? ⌐434⌐ command switches the CG Tools software to context sensitive help mode. You can also switch to this mode by pressing the SHIFT + F1 key combination. For more information, see Context sensitive help ⌐92⌐.
- the RapidAction Keys ⌐435⌐ command displays the Help Viewer showing a key reference for the RapidAction keys ⌐185⌐ available on the connected RapidAction keyboard;
- the Keyboard Shortcuts ⌐435⌐ command displays the Help Viewer showing a list of keyboard shortcuts valid for all keyboard types;
- the Reference Manual ⌐435⌐ command displays a version of the help in Adobe Acrobat .PDF format;
- the Installation Manual ⌐435⌐ command displays the Clarity Installation, Operational Testing and Maintenance Manual file in Adobe Acrobat .PDF format. For more information, refer to CG Tools and Clarity documentation ⌐105⌐.

5.2.4   Status bar

Information about certain user interface items is built into the software, separate from the online help. Use the Status bar at the bottom of the main application window to familiarize yourself with the tools.
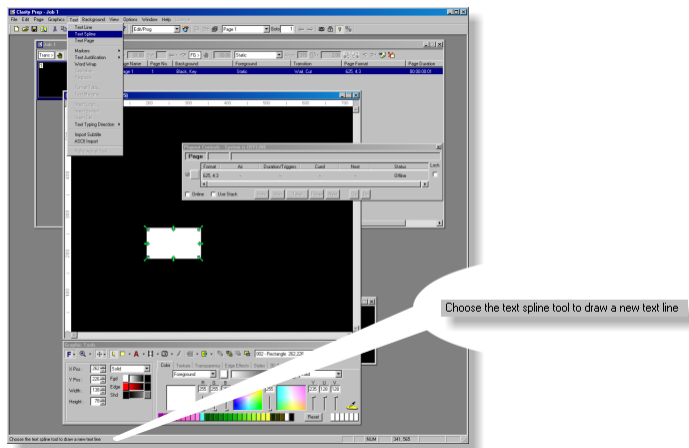
The Status bar displays details of what tools, controls, and menu commands do as you move the mouse cursor over them. The Status bar also displays the login name of the user logged into the current CG Tools session.

SEE ALSO

Status bar ⌐249⌐

5.2.5 Tooltips

Tooltips provide information about icons and tools on the user interface.
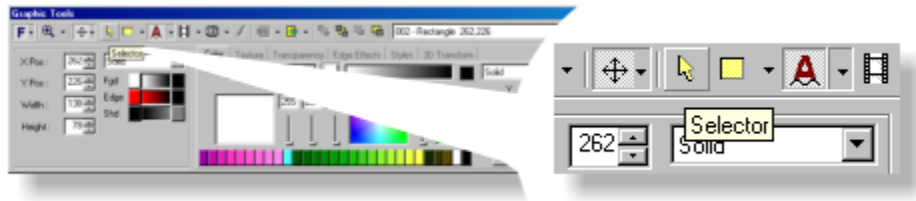
Tooltips display in a balloon when you position the mouse pointer over a tool.

5.3   Using CG Tools online help

These topics are organized into three main topic areas: general topics about using the Help Viewer 95, topics about using search functionality 99, and topics on changing the appearance of the Help Viewer 102.

5.3.1   The Help Viewer

These related topics describe most of the general features available in the Help Viewer.

5.3.1.1   Overview

On the left side of the window is the Navigation pane.

It contains four navigational tabs: the Contents tab, the Index tab, the Search tab and the Favourites tab. On the right side of the window is the Topic pane. It displays the selected help topic, or the default help topic. The third pane is the toolbar, which is located below the help window title bar.
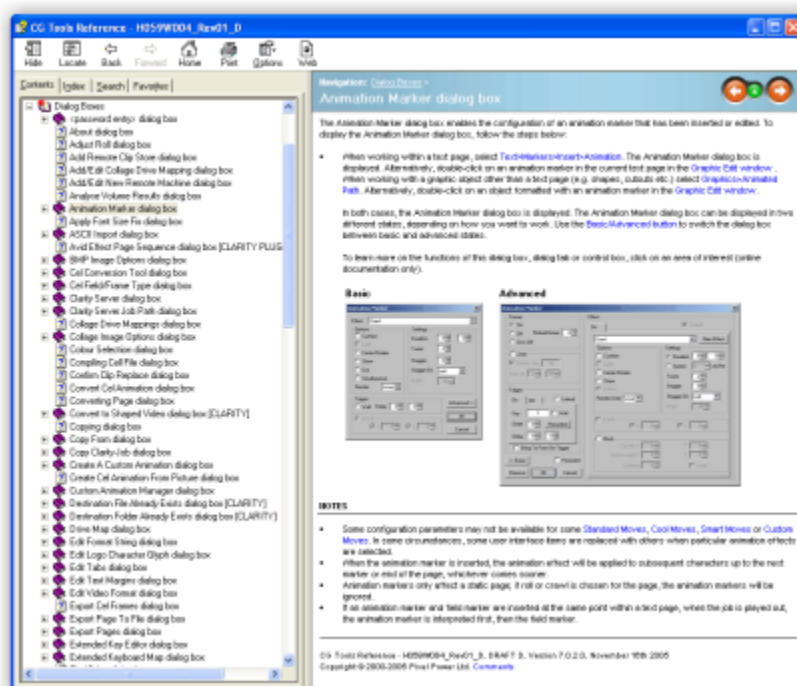
5.3.1.2   Getting more out of help

Here are some tips on how to find more information when using the Help Viewer:

- To link to another topic, a Web page, a list of other topics, or a program, click the coloured, underlined words.
- To view topics that contain related information, refer to the SEE ALSO links which may appear at the end of a topic, and then click the title of the topic you want.
- If you are viewing content from the Web in the Topic pane, you can select Stop or Refresh on the toolbar to interrupt a download or refresh a Web page.
- If you use a particular help topic often, you can add it to your favourites list 96.
- Right-click the Contents tab or Topic pane for shortcut menu commands 99.

95   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

5.3.1.3 Finding a help topic

In the Navigation pane, click one of the following tabs:

- To browse through a table of contents, click the Contents tab. The table of contents is an expandable list of important topics.
- To see a list of index entries, click the Index tab, and then type a word or scroll through the list. Topics are often indexed under more than one entry.
- To locate every occurrence of a word or phrase that may be contained in a help file, click the Search tab, and then type the word.

5.3.1.4 Creating a list of favourite topics

Locate the help topic you want to make a favourite topic, then select the Favourites tab, and then select Add.

NOTE

- To return to a favourite topic, click the Favourites tab, select the topic, and then select Display.
- If you want to rename a topic, select the topic, and then type a new name in the Current topic box.
- To remove a favourite topic, select the topic and then select Remove.

5.3.1.5 Copying a help topic

To copy and paste a help topic, follow the steps below:

1. In the Topic pane, right-click within a topic you want to copy, and then select Select All.
2. Right-click again, and then select Copy. This copies the topic to the Windows Clipboard.
3. Open the document you want to copy the topic to.
4. Position your cursor where you want the information to appear.
5. On the Edit menu, select Paste.

NOTE

If you want to copy only part of a topic, select the text you want to copy, right-click, and then select Copy.

5.3.1.6 Printing the current topic

Right-click within a topic, and then select Print.

NOTE

If you print from the Contents tab (by right-clicking an entry, and then clicking Print) you will see options to print only the current topic, or the current topic and all subtopics.

5.3.1.7 Finding topics using the toolbar

There are five navigational tools that can be located on the toolbar in the Help Viewer. You can select these tools to find help topics:

Tool	Description
Back	Displays the last topic you viewed.
Forward	Displays the next topic in a previously displayed sequence of topics.
Next	Displays the next topic listed in the table of contents.
Previous	Displays the previous topic listed in the table of contents.
Home	Displays the Home page topic for the help file you are viewing.
Refresh	Updates Web content that is currently displayed in the Topic pane.
Stop	Stops downloading file information. Click this button to stop a Web page from downloading.

NOTE

The toolbar in your Help Viewer may not contain all of these navigational buttons.

5.3.1.8 Hiding and showing the Navigation pane

On the toolbar, select Hide or Show to close or display the Navigation pane, which contains the Contents, Index, Search, and Favourites tabs.

NOTE

If you close the Help Viewer with the Navigation pane hidden, it will appear that way when you open it again.

5.3.1.9 Using accessibility shortcut keys in the Help Viewer

The following keyboard shortcuts can be used for navigation in the HTMLHelp Viewer. The help author who builds a compiled help (.CHM) file can specify which buttons appear on the toolbar, so some of these options may not be available in your version of the viewer.

For more information about accessibility features and services, visit the Microsoft Accessibility and Disabilities Web site.

For the Help Viewer:

To	Press
Close the Help Viewer.	ALT + F4
Switch between the Help Viewer and other open windows.	ALT + TAB
Display the Options menu.	ALT + O
Change Microsoft Internet Explorer settings. The Internet Options dialog box contains accessibility settings. To change these settings click the General tab, and then click Accessibility.	ALT + O, and then press I
Hide or show the Navigation pane.	ALT + O, and then press T
Print a topic.	ALT + O, and then press P
Move back to the previous topic.	ALT + LEFT ARROW, or ALT + O, and then press B
Move forward to the next topic (provided you have viewed it just previously).	ALT + RIGHT ARROW, or ALT + O, and then press F
Turn on or off search highlighting.	ALT + O, and then press O
Refresh the topic that appears in the Topic pane (this is useful if you have linked to a Web page).	F5, or ALT + O, and then press R
Return to the home page (help authors can specify a home page for a help system).	ALT + O, and then press H
Stop the viewer from opening a page (this is also useful if you are linking to the Web and want to stop a page from downloading).	ALT + O, and then press S
Jump to a predetermined topic or Web page. The help author who builds a compiled help (.CHM) file can add two links, on the Options menu, to important topics or Web pages. When you select a Jump command you go to one of those topics or Web pages.	ALT + O, and then press 1 or 2
Switch between the Navigation pane and the Topic pane.	F6
Scroll through a topic.	UP ARROW and DOWN ARROW, or PAGE UP and PAGE DOWN
Scroll through all the links in a topic or through all the options on a Navigation pane tab.	TAB

97   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

For the Contents tab:

To	Press
Display the Contents tab.	ALT + C
Open and close a book or folder.	PLUS SIGN and MINUS SIGN, or LEFT ARROW and RIGHT ARROW
Select a topic.	DOWN ARROW and UP ARROW
Display the selected topic.	ENTER

For the Index tab:

To	Press
Display the Index tab.	ALT + N
Type a keyword to search for.	ALT + W, and then type the word
Select a keyword in the list.	UP ARROW and DOWN ARROW
Display the associated topic.	ALT + D

For the Search tab:

To	Press
Display the Search tab.	ALT + S
Type a keyword to search for.	ALT + W, and then type the word
Start a search.	ALT + L
Select a topic in the results list.	ALT + T, and then UP ARROW and DOWN ARROW
Display the selected topic.	ALT + D
The following options are only available if full-text search is enabled	
Search for a keyword in the result list of a prior search.	ALT + U
Search for words similar to the keyword. For example, to find words like "running" and "runs" for the keyword "run."	ALT + M
Only search through topic titles.	ALT + R

For the Favourites tab:

To	Press
Display the Favourites tab.	ALT + I
Add the currently displayed topic to the Favourites list.	ALT + A
Select a topic in the Favourites list.	ALT + P, and then UP ARROW and DOWN ARROW
Display the selected topic.	ALT + D
Remove the selected topic from the list.	ALT + R

NOTES

- There are also <u>shortcut menu commands</u> [99] that can be accessed through the keyboard.
- Shortcut keys also work in secondary and pop-up windows. Every time you use a shortcut key in the Navigation pane, you lose focus in the Topic pane. To return to the Topic pane, press F6.
- The Match similar words check box, on the Search tab, will be selected if you used it for your last search.

5.3.1.10   Using the shortcut menu commands

There are several commands on the shortcut menu that you can use to display and customize information.

Action	Description
Right-click in the table of contents, and then select Open All.	Opens all books or folders in the table of contents. This command only works if the Contents tab is displayed.
Right-click in the table of contents, and then select Close All.	Closes all books or folders. This command only works if the Contents tab is displayed.
Right-click, and then select Print.	Prints the topic. 96
Right-click in the table of contents, and then select Customize.	Opens the Customize Information Wizard, which allows you to customize the documentation. If the help file was built with information types, you can use this wizard to select a subset of topics to view. For example, you could choose to see only overview topics.

NOTE

These commands can be accessed through the keyboard. You can press SHIFT+F10 to display the shortcut menu, and then click the appropriate shortcut keys.

5.3.2   Full-text search

A compiled help file can include a Search tab that allows a user to search through every word in a help file to find a match. For example, if a user does a full-text search on the word "index," every topic that contains the word "index" will be listed.

Depending on how complex your help system is, the Search tab can contain either basic or advanced full-text search functionality. Advanced full-text search allows a user to search using boolean, wildcard, and nested expressions.

5.3.2.1   Highlight words in searched topics

When searching for words in help topics, you can have each occurrence of the word or phrase highlighted in the topics that are found. To highlight all instances of a search word or phrase, click Options on the toolbar, and then select Search Highlight On.

NOTE

- To turn off this option, select Options on the toolbar, and then select Search Highlight Off.
- If you are viewing a long topic, only the first 500 instances of a search word or phrase will be highlighted.

5.3.2.2   Use full-text search

To use full-text search, follow the steps below:

1. Select the Search tab, and then type the word or phrase you want to find.
2. Select List Topics, select the topic you want, and then select Display.

5.3.2.3   Advanced full-text search

Advanced full-text search allows a user to search using boolean, wildcard, and nested expressions. A user can also limit the search to previous results, match similar words, or search topic titles only. When advanced full-text search is enabled, the Search tab in the Help Viewer is enhanced.

5.3.2.3.1 Searching for help topics

A basic search consists of the word or phrase you want to find. You can use wildcard expressions [100], nested expressions [101], boolean operators [101], similar word matches [100], a previous results list [100], or topic titles [101] to further define your search.

The basic rules for formulating queries are as follows:

- Searches are not case-sensitive, so you can type your search in uppercase or lowercase characters.
- You may search for any combination of letters (a-z) and numbers (0-9).
- Punctuation marks such as the period, colon, semicolon, comma, and hyphen are ignored during a search.
- Group the elements of your search using double quotes or parentheses [101] to set apart each element.
- You cannot search for quotation marks.

NOTE

If you are searching for a file name with an extension, you should group the entire string in double quotes, ("filename.ext"). Otherwise, the period will break the file name into two separate terms. The default operation between terms is AND, so you will create the logical equivalent to "filename AND ext."

5.3.2.3.2 Finding information with advanced full-text search

To find information with advanced full-text search follow the steps below:

1. Click on the Search tab, and then type the word or phrase you want to find.
2. Click to add boolean operators [101] to your search.
3. Click on List Topics, then select the topic you want, and then click Display. To sort the topic list, click the Title, Location, or Rank column heading.

NOTE

- You can precisely define a search by using wildcard expressions [100], nested expressions [101], and boolean operators [101].
- You can request similar word matches [101], search only the topic titles [101], or search the results of a previous search [102].
- You can set the Help Viewer to highlight all instances of search terms that are found in topic files. Click on the Options button, and then select Search Highlight On. This feature only works with Internet Explorer 4.0 or later.

5.3.2.3.3 Searching for words or phrases

You can search for words or phrases and use wildcard expressions. Wildcard expressions allow you to search for one or more characters using a question mark or asterisk.

The table below describes the results of these different kinds of searches.

Search for	Example	Results
A single word	select	Topics that contain the word "select." (You will also find its grammatical variations, such as "selector" and "selection.")
A phrase	"new operator" or new operator	Topics that contain the literal phrase "new operator" and all its grammatical variations. Without the quotation marks, the query is equivalent to specifying "new AND operator," which will find topics containing both of the individual words, instead of the phrase.
Wildcard expressions	esc* or 80?86	Topics that contain the terms "ESC," "escape," "escalation," and so on. The asterisk cannot be the only character in the term. Topics that contain the terms "80186," "80286," "80386," and so on. The question mark cannot be the only character in the term.

NOTE

Select the Match similar words check box [101] to include minor grammatical variations for the phrase you search.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   100

Copyright © 2000-2006 Pixel Power Ltd.

5.3.2.3.4   Defining search terms

The AND, OR, NOT, and NEAR operators enable you to precisely define your search by creating a relationship between search terms.

The following table shows how you can use each of these operators. If no operator is specified, AND is used. For example, the query "spacing border printing" is equivalent to "spacing AND border AND printing."

Search for	Example	Results
Both terms in the same topic.	dib AND palette	Topics containing both the words "dib" and "palette."
Either term in a topic.	raster OR vector	Topics containing either the word "raster" or the word "vector" or both.
The first term without the second term.	ole NOT dde	Topics containing the word "OLE," but not the word "DDE."
Both terms in the same topic, close together.	user NEAR kernel	Topics containing the word "user" within eight words of the word "kernel."

NOTE

The |, &, and ! characters don't work as boolean operators (you must use OR, AND, and NOT).

5.3.2.3.5   Using nested expressions

Nested expressions allow you to create complex searches for information. For example, "control AND ((active OR dde) NEAR window)" finds topics containing the word "control" along with the words "active" and "window" close together, or containing "control" along with the words "dde" and "window" close together.

The basic rules for searching help topics using nested expressions are as follows:

- You can use parentheses to nest expressions within a query.
- The expressions in parentheses are evaluated before the rest of the query. If a query does not contain a nested expression, it is evaluated from left to right. For example: "Control NOT active OR dde" finds topics containing the word "control" without the word "active," or topics containing the word "dde." On the other hand, "control NOT (active OR dde)" finds topics containing the word "control" without either of the words "active" or "dde."
- You cannot nest expressions more than five levels deep.

5.3.2.3.6   Searching for words in the titles of HTML files

To search for word in the titles of HTML files, follow the steps below:

1. On the Search tab, type the word or phrase you want to find, and then select the Search titles only check box.
2. Click on List Topics, select the topic you want, and then click Display.

NOTE

If you use this option, all HTML topic files will be searched, including any that are not listed in the table of contents.

5.3.2.3.7   Finding words similar to your search term

This feature enables you to include minor grammatical variations for the phrase you search. For example, a search on the word "add" will find "add," "adds," and "added."

1. On the Search tab, type the word or phrase you want to find, and then select the Match similar words check box.
2. Click on List Topics, select the topic you want, and then click Display.

NOTE

This feature only locates variations of the word with common suffixes. For example, a search on the word "add" will find "added," but it will not find "additive."

5.3.2.3.8   Searching previous results

This feature enables you to narrow a search that results in too many topics found. You can search through your results list from previous search by using this option.

1.   On the Search tab, select the Search previous results check box.
2.   Click on List Topics, select the topic you want, and then select Display.

NOTE

If you want to search through all of the files in a help system, this check box must be cleared. The Search tab will open with this check box selected if you previously used this feature.

5.3.3   Changing the Help Viewer

Users can make a variety of changes to the Help Viewer. These related topics describe settings the user can specify.

5.3.3.1   Customize the Help Viewer

There are a few ways to easily change the size and position of the Help Viewer and the panes in the viewer:

• To resize the Navigation or Topic pane, point to the divider between the two panes. When the pointer changes to a double-headed arrow, drag the divider right or left. To proportionally shrink or enlarge the whole Help Viewer, point to any corner of the viewer. When the pointer changes to a double-headed arrow, drag the corner.
• To change the height or width of the Help Viewer, point to the top, bottom, left, or right edge of the viewer. When the pointer changes to a double-headed arrow, drag the edge.
• To reposition the Help Viewer on your screen, click the title bar and drag the viewer to a new position.

NOTE

The HTMLHelp Viewer will appear with the last size and position settings you specified when it is opened again.

5.3.3.2   Changing the colours in the Topic pane

To change the topic colours in the topic pane, follow the steps below:

1.   In Microsoft Internet Explorer 4.0, select Internet Options from the View menu,
2.   On the General tab, select Colours.
3.   In the Colours dialog box, select the options you want, and then select OK.
4.   To apply the new colour settings, in the Internet Options dialog box, select OK.

NOTE

These changes do not apply to the Navigation pane or toolbar of the Help Viewer. This will also change your colour settings for Internet Explorer 4.0.

5.3.3.3   Changing the font size of a topic

To change the font size of a topic, follow the steps below:

• On the Options menu, select Internet Options, and then select Fonts.

NOTE

These changes do not apply to the Navigation pane or toolbar of the Help Viewer. This will also change your font settings for Internet Explorer.

5.4 Pixel Power Technical Support

Pixel Power technical support staff are available to provide customers around the globe with timely, knowledgeable operational and engineering support. Casual support inquiries may be submitted using our convenient online form.

http://www.pixelpower.com/support_enquiry.html

5.4.1 Contacting Pixel Power for support and other enquires

Pixel Power has dedicated technical support engineers who provide support during office hours. Most technical support queries are resolved with a short telephone conversation.

	UK technical support	US technical support
Address:	Pixel Power Ltd. College Business Park Coldhams Lane Cambridge CB1 3HD ENGLAND	Pixel Power Inc. 1000 W. McNab Pompano Beach FL 33069 USA
TEL:	+44 (0) 1223 721000	+1-954-943-2026
FAX:	+44 (0) 1223 721111	+1-954-943-2035
EMAIL:	support@pixelpower.com	support@pixelpower.com
Office Hours:	8.30am - 6pm GMT Monday - Friday	9am - 5pm EST Monday - Friday

5.4.2 Information required when contacting support

Whenever you contact Pixel Power for support, please have the following information available (is applicable):

- Product name and software version number shown on the About dialog box 558 (accessed using Help> 434 About 435).
- Please supply the serial number located on the system unit rear panel (if applicable).
- Precise description of the problem and any solutions that you have attempted.
- Exact wording of any error messages displayed.

5.4.3 Product warranty and support options

For more information about the original equipment warranty, post warranty service options and pricing, training programmes and important information about returning your product for service or repair, please contact support.

5.4.4 Software anomalies and documentation errors

In spite of the extensive testing that all CG Tools software products and documentation undergoes before release, we are realistic enough to admit that things are occasionally missed. If you believe you have found either:

- a software error;
- an omission or error in any associated documentation,

then it is essential that you pass this information on to the Technical Support department at Pixel Power. Remember, if you do not tell us about these errors, then we are not able to fix them. If the software bug is serious enough to affect major software operations, then we are generally able to provide an intermediate version of software which fixes the problem.

When using the online help, you can comment on a particular topic easily if you have an internet connection on the system available on which you are viewing the help. There is a Comments hyperlink at the bottom of each topic.
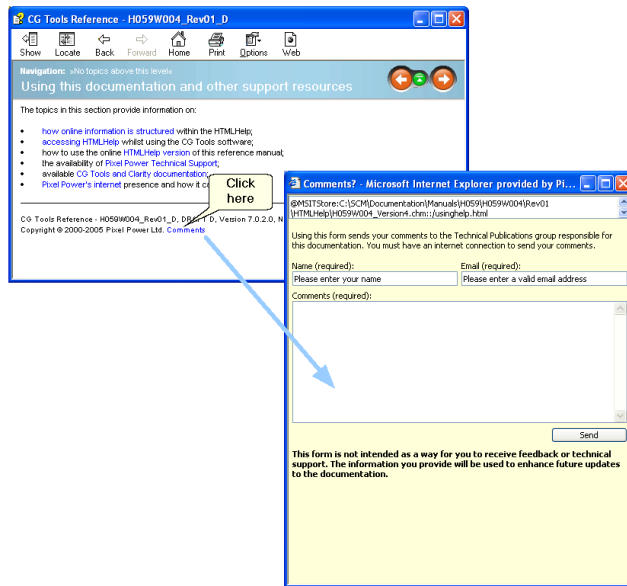
Click on this link to open a form where you can post comments about the selected topic. The internal HTML Help topic ID is automatically pasted into the form for your convenience.

This form is not intended as a way for you to receive feedback or technical support. The information you provide will be used to enhance future updates to the documentation.

5.4.5   Spares

The local distributor will generally hold a selection of spares in stock. If you wish to provide your own spares holding, the distributor will be happy to advise on suitable spares and their prices.

5.4.6   Suggestions

Pixel Power always welcomes suggestions for new features and enhancements which wherever possible are incorporated into forthcoming releases. These should be communicated to the Technical Support department at Pixel Power directly or through the local distributor.

5.5　CG Tools and Clarity documentation resources

The following sections detail the CG Tools and Clarity documentation resources currently available.

5.5.1　Manuals and guides

Manual and guides are named using the following convention:

```
H059_Wnnn_Revnn_A
```

Part	Description
H059	Signifies the Clarity product range.
Wnnn	Indicates a manual/guide and incremental number ID.
Rev_nn_A	Revision number and draft status.

Sections that are exported from a manual for standalone use are named using the following convention:

```
<section_name_H059Wnnn>
```

The following manuals and guides are currently available to support the CG Tools and Clarity range of products. See <u>Program group structure</u> 119⌐ for more information on how to open manuals and guides that get installed with the CG Tools software.

Part Number/File Name	Title	Purpose	Format
H059W002	Clarity and Clarity PREP Quick Start Guide	Quick guide to the installation of Clarity 100, 200, 300, 3000, 500 and 5000 systems and the CG Tools software.	Adobe Acrobat PDF
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Helps you to: • learn about the Clarity product and its development history; • learn about Clarity hardware and CG Tools software features; • learn about Clarity systems and related peripheral specifications; • install a Clarity system unit and/or prepare a PC for Clarity PREP software installation; • install and upgrade Clarity and Clarity PREP software; • configure Clarity hardware system options; • learn about the internal make-up of Clarity system units; • perform physical maintenance on Clarity system units; • configure Clarity and Clarity PREP software system options;	Adobe Acrobat PDF
H059W004	CG Tools, Supporting Applications and Tools Reference	Provides both an in-depth guide to the features and functionality of the CG Tools software and also a day-to-day reference to the software's user interface including menus and dialog boxes.	HTMLHelp or Adobe Acrobat PDF
Keyboard_Shortcuts_H059W004.pdf	CG Tools Keyboard Shortcut Quick Reference	Learn more about keyboard shortcut key combinations for all keyboards. A simple double sided document that can be printed out for your own reference.	Adobe Acrobat PDF
RAK1_Shortcuts_H059W004.pdf	RapidAction Keyboard Version 1 Key Reference	Learn more about RapidAction keys available on the RapidAction Keyboard Version 1. A simple double sided document that can be printed out for your own reference.	Adobe Acrobat PDF

Part Number/File Name	Title	Purpose	Format
RAK2_Shortcuts_H059 W004.pdf	RapidAction Keyboard Version 2 Key Reference	Learn more about RapidAction keys available on the RapidAction Keyboard Version 2. A simple double sided document that can be printed out for your own reference.	Adobe Acrobat PDF

5.5.2 Software release notes

Separate software release notes in Adobe Acrobat format previously accompanied every periodic CG Tools software release. Release information now forms part of this reference and is updated for every periodic CG Tools release. Release notes can be found in the [Release notes] 52 section of this reference. Release note information features the following topics:

- Known problems;
- New features;
- Updates to documentation not linked to current or previous releases.

IMPORTANT

Before downloading and/or installing a new version of the CG Tools software, we STRONGLY recommend that you contact Pixel Power Technical Support to check any outstanding issues that may affect your installation.

5.5.3 Documentation CD-ROM

All documentation currently available to support the Clarity and CG Tools range of products is available on CD-ROM:

Part Number	Title	Purpose	Format
SCD007	Clarity, Clarity PREP and Clarity Plugin Documentation	Latest formally released technical documentation.	CD-R
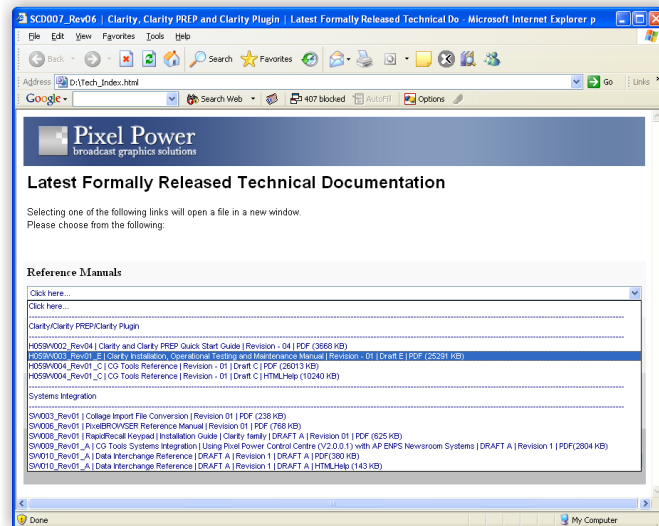
5.6   Pixel Power on the internet

Our website contains a wealth of information in a variety of sections.

http://www.pixelpower.com

SEE ALSO

5.6.1   About Pixel Power

To learn more about Pixel Power's history and emergence as a supplier of powerful, multi-functional and inter connective graphics solutions, see the following page on our website:

http://www.pixelpower.com/about.html

5.6.2   Distributors

To locate your nearest distributor, see the following page on our website:

http://www.pixelpower.com/distributors.html

5.6.3   Downloads and software release information

To keep your system up-to-date with new features and performance enhancements, see the following page on our website:

http://www.pixelpower.com/resources_downloads.aspx

This area also features release notes for previous version of the CG Tools version 7 software.

5.6.4 Freelancers

To locate Clarity systems professionals who can provide expert assistance for special events or urgent projects, see the following page on our website:

http://www.pixelpower.com/resources_freelancers.aspx

5.6.5 Mailing list

Be the first to learn about new features, software releases and upgrades without having to access our website. Once on our list you will receive occasional newsletters, press releases, product announcements, etc. via e-mail.

http://www.pixelpower.com/products.html

IMPORTANT

We respect your privacy. This list is exclusively for use by Pixel Power and will not be distributed to other vendors.

5.6.6 News

To catch up on the latest information regarding Pixel Power, Clarity and CG Tools product news, see the following page on our website:

http://www.pixelpower.com/news.aspx

5.6.7 Press resources

To see the latest press releases and press resources (images etc.) plus press contacts, reference sites and partner information, see the following page on our website:

http://www.pixelpower.com/about_press.html

5.6.8 Product demos

To see off-air examples (master control & branding, sports, audience interactive etc.) of Clarity graphics and demonstrations of specific features, see the following page on our website:

http://www.pixelpower.com/products_demo.aspx

5.6.9 Product information

To see more information about the Clarity and CG Tools range of products, see the following page on our website:

http://www.pixelpower.com/products_product_info.html

NOTE

For detailed information on Clarity hardware, refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G).

5.6.10   Support

Our website features a software support section where you can obtain information about training, submit casual software support queries, view frequently asked questions and download software updates. There is also an product registration page that will enable to you register your product online.

For more information about these services, see the following page on our website:

http://www.pixelpower.com/support.html

5.6.11   Training

To find out more about face to face training and access online tutorials to demonstrate the rich functionality of our products, see the following page on our website:

http://www.pixelpower.com/resources_training.html

 Pixel power training courses are presented by expert training staff that have an in-depth knowledge in the use and application of the complete range of Pixel Power products. Training may be presented on-site at your own premises or at the Pixel Power offices in Cambridge, UK or Pompano, FL USA. Our experienced training staff guarantee a friendly and relaxed atmosphere.

Macromedia® Flash® based online tutorials allow users to learn at their own pace about specific real-world tasks.
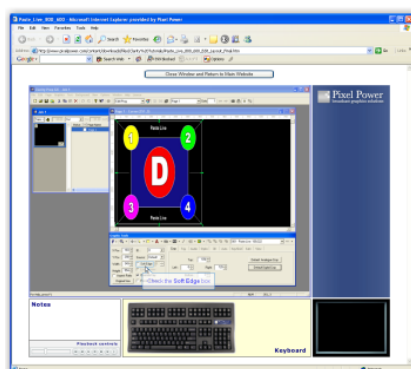
SEE ALSO

http://www.macromedia.com/shockwave/download/download.cgi?P1_Prod_Version=ShockwaveFlash

5.6.12   User-to-User forums

The online support forums are available to any bona fide Pixel Power user with a valid software maintenance agreement. This includes all Pixel Power users during the first year after purchasing their Collage, Graphite, Clarity system or CG Tools software product.

To gain access to the online user support forums you will need a login ID and password. Please complete and submit the short form via the following link:

http://www.pixelpower.com/support_forum.html

Your login ID will be sent via email before the close of the next business day.

Freelance operators and those who are not otherwise an employee of a Pixel Power user site may request a login ID and password via an e-mail to support@pixelpower.com. Please state clearly the reason for your request.

Once we have confirmed your login ID and password via email, you can access the login page for the forums using the following address:

http://pixelwww.pixelpower.com/cgi-bin/yabb/YaBB.pl

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   110

Copyright © 2000-2006 Pixel Power Ltd.

Section 6

Getting started

6. Getting started

This section explains the following:

- software licensing [114];
- information on what get's installed [116] in a standard CG Tools installation;
- how to start [120] the Clarity or Clarity PREP software;
- basic system configuration and testing [122] to ensure that a system is working correctly;
- intermediate level CG Tools user management, Clarity server and job copy configuration (7.1.0.0) [128]
- keyboards [177], dedicated shortcut keys [185] and keyboard shortcuts [201];
- keypads [211];
- concepts [244] surrounding how products work;
- details of the GUI components [245].

Finally, it explains how to exit [375] the selected software product and shut down a Clarity system unit correctly. After you have read this section, you will want to start experimenting.

6.1 Software licencing

The CG Tools software is controlled using the DK2 DESkey licensing system. It features three active components:

- blue USB licence dongle;
- DK2 client software;
- DK2 server software (optional; only relevant when using a network licence server).

Information about installing the DK2 DESkey licensing system to work in conjunction with the CG Tools range of products is documented in the following publications:

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Software Installation and Upgrade
H059W002	Clarity and Clarity PREP Quick Start Guide	

DK2 software licensing should have been installed and configured using the instructions in the publications listed above. A brief description of how licensing works for each available CG Tools product is given in the subsequent sections.

SEE ALSO

Clarity [114]
Clarity PREP and Clarity Plugin [114]
How are software features controlled? [115]
What happens when my software support agreement ends? [115]

6.1.1 Clarity

Each system is accompanied with a single blue USB licence dongle which is valid for only that system. It should be plugged into an available USB port on the system front or rear panel. The system is pre-installed with the latest CG Tools software and a CLIENT version of the DK2 DESkey software and thus requires NO FURTHER software installation.

6.1.2 Clarity PREP and Clarity Plugin

When purchasing multiple copies of Clarity PREP or Clarity Plugin, you had the option to

a)   purchase single licences for each copy (one physical licence dongle per copy) or;
b)   purchase a single floating licence for multiple copies (one physical licence dongle for all copies).

If you chose the first option and are in receipt of multiple dongles, a client version of the DK2 DESkey licensing software is installed as part of each CG Tools software installation. If you chose the second option and are in receipt of a single dongle, this dongle should be installed on a machine enlisted to be the licence server machine. This machine

should be accessible via the local area network from all machines running the Clarity PREP or Clarity Plugin software. Speak to your IT or networking manager for more information.

The machine enlisted as the network licence server must installed with the following:

- the single blue USB licence dongle;
- a copy of the DK2 DESKey Network Server licensing software.

6.1.3 How are software features controlled?

Each dongle that is supplied with Clarity systems and the Clarity PREP/Plugin software is programmed exclusively to offer software features chosen by each customer. Each dongle is assigned an exclusive identification number which should be recorded as it may be requested by Pixel Power technical support.

The identification number, software support renewal date and software features applicable to the current licence dongle can be displayed using the Licence> ⌐435⌐ Show Features ⌐436⌐ menu command. The Supported Features dialog box ⌐806⌐ is displayed.

If at some point after purchasing, you decide that you would like to purchase additional software features to improve the CG Tools feature set, you can do so by contacting Pixel Power technical support. After discussing the options available and upon receiving payment, you will receive a new licence dongle code that will enable the chosen new features. Information regarding available features and product options is detailed in the Optional licensed features and other product options available for one or more products or derivatives ⌐13⌐ section.

You may also be required to upgrade your CG Tools software so that new feature(s) can be enabled. It is important to note you must have a valid current software support agreement ⌐115⌐ currently in operation. This is available free for a 15 month period from the date of despatch from the relevant Pixel Power premises (see Contacting Pixel Power for support and other enquires) ⌐103⌐.

The renewal date is shown on the Supported Features dialog box ⌐806⌐. After this date, an additional term must be purchased in order to receive and install free software updates.

After receiving the code, select Licence> ⌐435⌐ Licence Entry ⌐436⌐ to display the Licence Entry dialog box ⌐736⌐. Copy the code from the email into the dialog box and select OK.

Some new features may only be available after the relevant CG Tools software product has been re-started.

SEE ALSO

6.1.4 What happens when my software support agreement ends?

Once the software support expiry date is reached, the ability to install and run upgrades is revoked until a further support package is purchased.

Each CG Tools software product features a stored software support expiry date. This date is exactly 15 months from the date of despatch from the relevant Pixel Power premises (see Contacting Pixel Power for support and other enquires) ⌐103⌐.

The expiry date prevents any software created AFTER that date from being installed to upgrade your current version. The expiry date is shown on the Supported Features dialog box ⌐806⌐ which can be displayed by selecting Licence> ⌐435⌐ Show Features ⌐436⌐.

To renew your software support agreement, contact Pixel Power technical support. After discussing the options available and upon receiving payment, you will receive a new licence dongle code that will enable any subsequent software upgrades to install and function correctly.

After receiving the code, select Licence> ⌐435⌐ Licence Entry ⌐436⌐ to display the Licence Entry dialog box. Copy the code from the email into the dialog box and select OK.

6.2 What get's installed?

The subsequent sections detail the installation folder structure [116] and Microsoft® Windows® Start menu program group structure [119].

6.2.1 Installation folder structure

An installation of the CG Tools software results in the creation of the following folder structure within your selected installation path. The following files and folders are installed within the Pixel Power Ltd. folder. Files or folders that are created by a software operation that is subsequent to the CG Tools software installation are highlighted with purple shading.

The default installation folder is:

`C:\Program Files\Pixel Power Ltd`

Custom animations used to be stored in a `Custom Animation` folder under the CG Tools version install e.g. `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Custom Animations`. Custom animations for a particular job are now stored in a hidden folder beneath the folder where the job file is located, similar to the background update files also used by some jobs. See Custom Animations [20], Animation Marker dialog box [565], Changes to custom animation implementation for CG Tools version 7.1.0.6 [465] and Graphical representation of new custom animation implementation [467].

Path/Folder	Description		
	Sub-Folder	**Files**	**Description**
Bin	Repository for CG Tools ancillary applications.		
		Chyron Remote Server_SysTray.exe	Converts Chyron Infinite remote control protocol commands supplied via a serial communications port into Clarity DCOM network control calls.
		Clarity XML Serial Server_SysTray.exe	Application for parsing Clarity XML protocol commands via a serial port.
		ClarityCOM15.exe	Microsoft compatible COM object giving the ability to update data and control a Clarity system unit using the Clarity XML protocol.
		ClarityCOM15.tlb	
		RapidRecallKeypad.exe	Enables RapidRecall Keypad control of Clarity system units by enabling a DCOM connection to be created and maintained between a Clarity system unit and a PC that has a RapidRecall keypad connected to an available RS232 serial port or Ethernet network port.
		Socket Server App.exe	Application for parsing Clarity XML protocol commands via TCP/IP socket.

Path/Folder	Description		
	Sub-Folder	**Files**	**Description**
`CG Tools 7.1`	Repository for CG Tools software executable and associated application resource files.		
	`AutoSaves`	*Files written when required.*	Automatically saved versions of any jobs that have been worked on. See Automatically saving jobs [126].
	`Configurations`	*Legacy folder; not currently used.*	
	`Defaults`	Repository for various CG Tools software default settings.	
		`DefaultMapping.txt`	Default font mapping shipped with the software. This maps the standard 500 Bitstream fonts shipped with Collage to TrueType equivalents on the Windows local system running the CG tools software. See Font Mappings dialog box [642].
		`Dictionary.txt`	Default CG Tools software dictionary. See Spelling [546], Importing new words into a dictionary [546] and Checking text [546].
	`Documents`	Repository for CG Tools documentation. See Manuals and guides [105].	
		`H059W002.pdf`	Adobe Acrobat PDF version of the Clarity and Clarity PREP Quick Start Guide.
		`H059W003.pdf`	Adobe Acrobat PDF version of the Clarity Installation, Operational Testing and Maintenance Manual.
		`H059W004.chm`	HTMLHelp version of the CG Tools, Supporting Applications and Tools Reference.
		`H059W004.pdf`	Adobe Acrobat PDF version of the CG Tools, Supporting Applications and Tools Reference.
		`Keyboard_Shortcuts_H059W004.pdf`	Adobe Acrobat PDF version of the Keyboard Shortcut Quick Reference.
		`RAK1_Shortcuts_H059W004.pdf`	Adobe Acrobat PDF version of the RapidAction Version 1 Keyboard Key Reference.
		`RAK2_Shortcuts_H059W004.pdf`	Adobe Acrobat PDF version of the RapidAction Version 2 Keyboard Key Reference.
		`XMLHelpIDMap.xml`	Help ID map file for the CG Tools software.
	`Driver`	*Numerous files (descriptions not required).*	System hardware drivers. These are only present when you have chosen to install the Clarity software product.
	`Hardware`	*Numerous files (descriptions not required).*	System hardware files. These are only present when you have chosen to install the Clarity software product.
	`Job Fonts`	*Files written when required.*	Repository for any fonts that are required by copied jobs that are not already installed on the local system.
	`Smart Cache`	*Files written when required.*	When Smart Moves are rendered, they are saved directly to disk and will stay there until they are needed i.e. they do not need to be re-rendered each time the job is loaded. See Rendering Smart Moves and managing cache files [532] and Caching dialog tab [707].
	`SubFiles`	*Numerous files.*	Miscellaneous CG Tools sub-files. These include Collage drive map configuration, supported Code Pages and extended keyboard mapping files. See RapidAction keyboard mapping files (.EKM) [178].
	`Wallpaper`	Repository for Pixel Power desktop wallpapers saved in various resolutions. Only present when you have chosen to install the Clarity software product.	

Path/Folder	Description		
	Sub-Folder	**Files**	**Description**
CG Tools Config		*Numerous files (descriptions not required).*	Miscellaneous CG Tools configuration files including local copies of the user management XML configuration files, dongle configuration files etc. See <u>Intermediate level CG Tools user management, Clarity Server and job copy configuration</u> 128.
CG Tools Shared		*Numerous files (descriptions not required).*	Miscellaneous CG Tools shared files.
Format Conversion		*Numerous files.*	Video and audio conversion tools. See <u>Command line file conversion</u> 1056.
Lead Tools		*Numerous files (descriptions not required).*	Image processing resources.
Misc Shared		*Numerous files (descriptions not required).*	Miscellaneous shared files.
PixelPowerApplicationLogs		*Numerous files and sub-folders (descriptions not required).*	See <u>CG Tools application logs</u> 1055 for more information.

6.2.2 Program group structure

An installation of the CG Tools software results in creation of some OR all of the following structure within your selected program group in the Microsoft® Windows® Start menu.

The default installation program group is:

`C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd`

Folder	Description	
	Files	**Description**
`Pixel Power Ltd`	Repository for CG Tools program shortcuts.	
	`Documentation`	Repository for documentation program shortcuts.
	`Keyboard Shortcut Quick Reference.lnk`	Link to Adobe Acrobat PDF version of the Keyboard Shortcut Quick Reference.
	`Maintenance Manual.lnk`	Link to Adobe Acrobat PDF version of the Clarity Installation, Operational Testing and Maintenance Manual.
	`Online Help.lnk`	Link to HTMLHelp version of the CG Tools, Supporting Applications and Tools Reference.
	`Quick Start Guide.lnk`	Link to Adobe Acrobat PDF version of the Clarity and Clarity PREP Quick Start Guide.
	`RapidAction Version 1 Keyboard Key Reference.lnk`	Link to Adobe Acrobat PDF version of the RapidAction Version 1 Keyboard Key Reference.
	`RapidAction Version 2 Keyboard Key Reference.lnk`	Link to Adobe Acrobat PDF version of the RapidAction Version 2 Keyboard Key Reference.
	`Reference Manual.lnk`	Link to Adobe Acrobat PDF version of the CG Tools, Supporting Applications and Tools Reference.
	`Chyron Remote Control Server.lnk`	Link to `Chyron Remote Server_SysTray.exe`.
	`Clarity 7.1 (Reprogram Hardware).lnk`	Link to `Clarity.exe` (with additional command line switches to re-program Clarity system hardware). Starts the Clarity ⌐7⌐ software derivative of the CG Tools software.
	`Clarity 7.1.lnk`	Link to `Clarity.exe`. Starts the Clarity ⌐7⌐ software derivative of the CG Tools software.
	`Clarity Prep 7.1.lnk`	Link to `Clarity.exe`. Starts the Clarity PREP ⌐8⌐ software derivative of the CG Tools software.
	`Rapid Recall Keypad – Playout Control Server.lnk`	Link to `RapidRecallKeypad.exe`.
	`XML Socket Server.lnk`	Link to `Socket Server App.exe`.

SEE ALSO

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

6.3 Starting the CG Tools software

6.3.1 Starting the CG Tools software: a quick guide

Once logged into Microsoft Windows NT/2000/XP, you can run the CG Tools software. To do this, follow the steps below.

1. Select the Start button on the Windows NT/2000/XP Taskbar.
2. Go to Programs>Pixel Power Ltd (of the preferred program group under which you installed the software.
3. Select Clarity (version number) to start the Clarity software, or Clarity PREP (version number) to start the Clarity PREP software.
4. If you are running the software on the Windows XP operating system, then the Windows Security Alert dialog box is displayed, informing you that the Windows Firewall has blocked the CG Tools executable from running.

5. Select Unblock to ensure that this dialog box is not displayed again, enabling the CG Tools software to run freely in future. The software starts and the start-up banner is displayed.
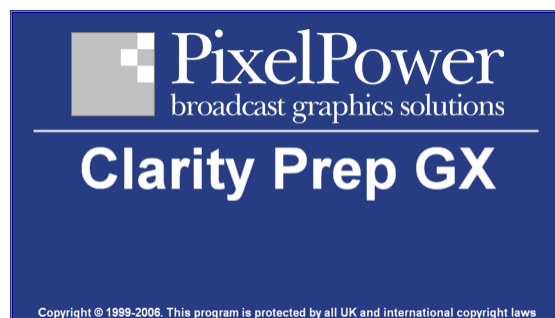
You can also start the relevant CG Tools software product by clicking on the shortcut icon on the desktop relating to the software product that you want to start.

NOTE

For more information on starting the Clarity Plugin, please refer to the documentation supplied with the Avid product that will host the plug-in.

6.3.2 Accessing a valid licence to operate

After starting the software, it will check for a valid licence dongle connected to the local machine. If during the software install, you specified a networked machine to operate as the licence server, the software will check this machine and try to obtain a licence.

If the software cannot access a valid licence dongle on the local or specified networked machine (the local or networked licence dongle may not be fitted or all current network licences may be used), a message will appear informing you that this is the case. Select OK to proceed. The subsequent software session will operate in demonstration mode.

When operating the related software product in demonstration mode, the software is unable to write files of any type to any disk (either local, networked or removable). This disables the saving of jobs and generation of any type of saved

media. Also, a "DEMO" watermark appears on every page created.

Other than these limitations, the software will operate in exactly the same manner as a licensed copy. Soon after the software has started, the CG Tools main application window 121 appears.

6.3.3 CG Tools main application window appearance

Once you have started your desired CG Tools application, you will see the CG Tools main application window. The appearance of the window changes, depending upon the window components that have been selected to appear. Unless you have explicitly changed settings or selected to copy settings from a previous version of the software during upgrade, the desktop is maximised and initially displays the following layout:
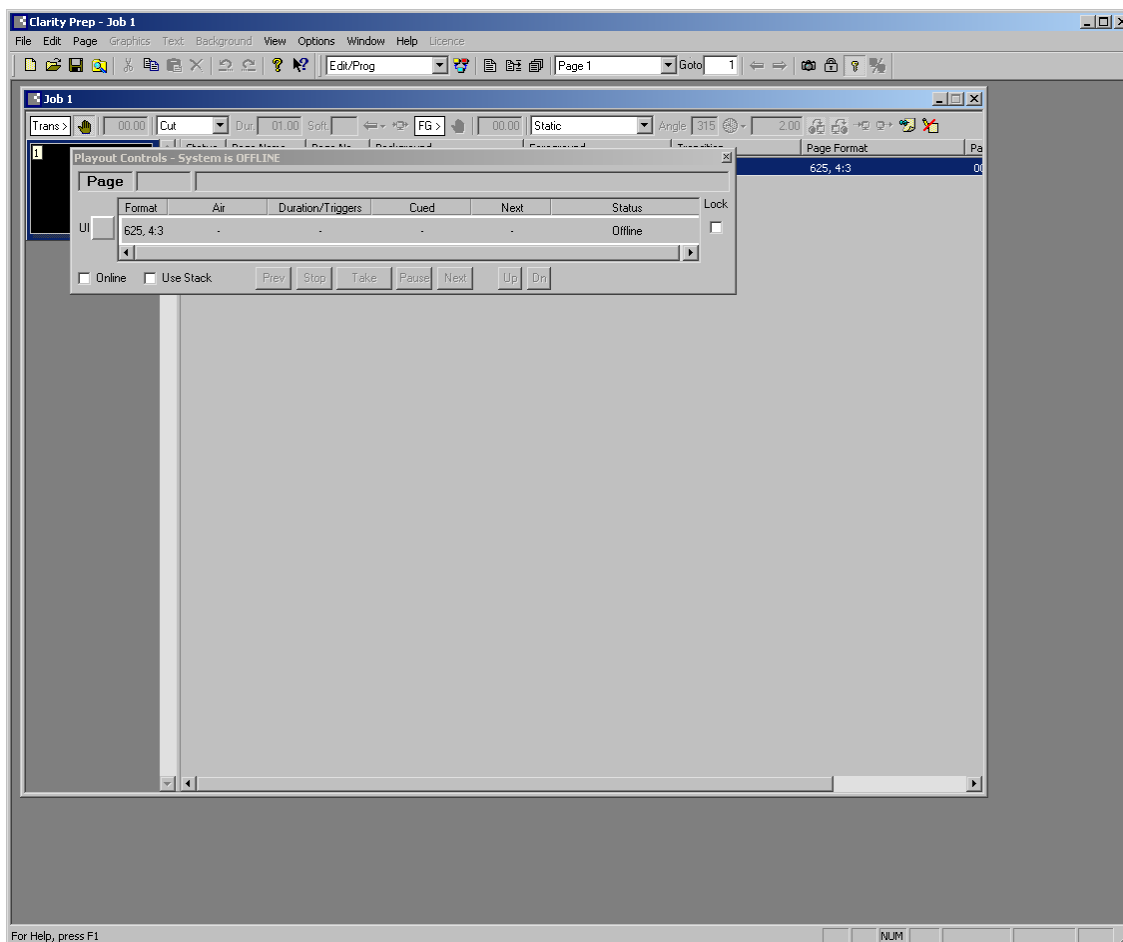
6.4 Basic level configuration and system test

During final testing of systems prior to delivery, systems are configured where possible to best match the operating requirements for each customer e.g. video standard etc. However, it is unlikely that your system will be configured to match your requirements to test that the system is operating correctly at your site. This section outlines a few procedures that will prove invaluable during day-to-day today configuration and testing.

We recommend that you complete the section relevant to your circumstances.

Procedure	Description
SD Hardware based systems	Configure system video format and aspect ratio ⌐123¬, live source ⌐123¬, default page format and aspect ratio ⌐123¬, check clip store availability ⌐123¬, create a basic page ⌐124¬ and then test page playout ⌐126¬.
Software based systems	Configure default page format and aspect ratio ⌐123¬.
Optional software configuration that maybe useful	Configure automatic saving of jobs ⌐126¬, graphics filtering on video outputs ⌐126¬, page video frame and aspect ratio mismatch ⌐127¬, automatic creation and editing of text pages ⌐127¬, previewing of live input on edit outputs whilst online ⌐127¬, scrolling of safe areas ⌐127¬ and undo/redo ⌐127¬.

A very large proportion of system configuration is achieved in the following areas:

Dialog box	Dialog tab	Description
User Preferences dialog box ⌐809¬	General ⌐714¬	General software options including auto-save ⌐816¬, Clarity job load ⌐816¬, software preview channel ⌐818¬ and start-up ⌐817¬.
	Edit ⌐810¬	Editing software options including undo/redo ⌐815¬, software edit mode ⌐812¬, graphics filtering ⌐817¬ and general text settings ⌐814¬.
SD Hardware Configuration dialog box ⌐786¬	Auxiliary A/B dialog tab ⌐787¬	Preview video options for channel A/B.
	Blanking A/B dialog tab ⌐789¬	Video line blanking options for channel A/B.
	Chan A/B dialog tab ⌐790¬	Video options for channel A/B.
	DSK A/B dialog tab ⌐792¬	DSK (Down Stream Keyer) options for channel A/B.

6.4.1 SD Hardware based systems [CLARITY]

This section describes system configuration to check that a newly installed Clarity 100, 200, 300 or 500 system unit is operational and fully functional. Information is relevant to both single and dual channel systems.
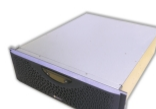
Clarity 100   **Clarity 200**   **Clarity 300**   **Clarity 500**

Example connection schematics are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity 100 STYLE A Connection Schematic Clarity 200 STYLE A Connection Schematic Clarity 300 STYLE A Connection Schematic Clarity 500 STYLE B Connection Schematic

As a guide, in order to test that a system is operating correctly, we recommend that the following video connections are

made in all cases:

Connection	Clarity 100 rear panel connector	Clarity 200 rear panel connector	Clarity 300 rear panel connector	Clarity 500 rear panel connector
Digital live source	VID IN (BNC)	VID IN (BNC)	VID IN (BNC)	Channel A VID IN (BNC)
Analogue monitor of Program output	Analogue Monitor Out (15-pin female D-type)	Analogue Monitor Out (15-pin female D-type)	Analogue Monitor Out (15-pin female D-type)	Channel A MON A (15-pin female D-type)
OPTIONAL external clip volume (Chaparral)	N/A	SCSI (opt. ext. clip storage) (68-pin male VHDCI)	SCSI (opt. ext. clip storage) (68-pin male VHDCI)	CLIP SCSI A (68-pin male VHDCI)

6.4.1.1 Set system wide video format and channel A aspect ratio

To set the video format and aspect ratio of the systems' video hardware, follow the steps below:

1. Select Options> [429] Hardware>SD Settings [431]. The SD Hardware Configuration dialog box [786] appears.
2. In the System settings group box [794], use the Video Format drop down list box [795] to select the video format that you want the system to operate in.
3. Select the Chan A [790] dialog tab.
4. In the Aspect ratio group box, depending on your video format selection, some or all of the Aspect Ratio and Custom controls may become enabled. Select 4:3, 14:9 or 16:9 to select the desired aspect ratio. If you want to configure a custom aspect ratio, select Custom and then configure the adjacent text boxes.

6.4.1.2 Set default live source for channel A

To set the default live source for channel A, follow the steps below:

1. Select Options> [429] Hardware>SD Settings [431]. The SD Hardware Configuration dialog box [786] appears.
2. Select the Chan A [790] dialog tab.
3. From the Default Live Source drop-down list box, select Live A.

6.4.1.3 Set default video format and aspect ratio of pages to match system

To set the default video format and aspect ratio of pages to match those set for the video hardware [123], follow the steps below:

1. Select Options> [429] User Preferences [430]. The User Preferences dialog box [809] appears.
2. Select the Page Formats dialog tab [819].
3. Select the video format to match the systems' format from the Format drop-down list box.
4. Depending on your video format selection, some or all of the Aspect Ratio controls may become enabled. Select 4:3, 14:9 or 16:9 to select the desired aspect ratio to match that set for the system.

6.4.1.4 Check clip store availability [OPTIONAL]

Information regarding the installation and configuration of the optional internal or external clip store is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity Clip Storage and Management.

To check that the optional internal or external clip store is functioning correctly, follow the steps below:

1. Select Options> [429] Local Preferences [430]. The Local Preferences dialog box [696] appears.
2. Select the Clip Store dialog tab [708].
3. Select the volume from the Volume group box and then select Benchmark to test the volumes' read performance.

6.4.1.5 Create basic page

Follow the steps below to create a basic page with the following attributes:

- Live background;
- Foreground strap containing a video clip, shape and text animation.

Create a new job and open Page 1 for editing

Select File> [378] New Job [379] to create a new job. A new job window is opened.

Firstly, notice that the blank page 1 in the Page Browser [251] shows the new page format and aspect ratio [253] in the corners of the page preview that was set in the steps earlier. Open page 1 by double-clicking on the preview in the Page Browser. The page is opened in the Graphic Edit window [260].

Set Page 1 background to live source A

1. Select Page> [390] Edit Settings [392]. The Page Settings dialog box [751] is displayed.
2. Select the Key / Matte dialog tab [763].
3. Check the Mix page over live in box and then ensure that Default Source For Channel option is selected. This confirms the page will use the default live source as specified in the steps earlier (see Set live source for channel A [123]).

Draw and configure rectangle shape

1. Select Graphics> [395] Shapes>Rectangle [400].
2. Click within the Graphic Edit window and drag to draw a rectangle shape.
3. Set the height of the rectangle to 60 and width to 720 using the Height and Width boxes on the Rectangle control set [309] on the Graphics Tools [266]. Set the X position to 360 and the Y position to 120 using the X and Y increment boxes.
4. To set the foreground colour, on the Colour control tab [277] on the Graphic Tools [266], select the first green colour from the Palette boxes.
5. To set a foreground transparency and shading type, on the Transparency control tab [295] on the Graphic Tools [266], set the Foreground Second increment box to 0. To set the transparency shading type, select Horizontal from the adjacent Shading Type drop-down list box.

Create text page and insert animation marker

After opening the page in the Graphic Edit window [260] for the first time, a text page will have been created automatically. To select the text page, select `001 - Text Page` from the Select Graphic drop-down list box on the Graphic Tools Toolbar [315]. The text page is selected for editing. This is indicated by the green text cursor in the top left of the page.

1. Enter the text:

   `System Test`

2. With the NUM LOCK function turned off on the numeric keypad, press left SHIFT + HOME to select the entire text page.
3. Whilst pressing and holding left CTRL + left ALT, press the arrow keys to move the text to suitable position over the rectangle drawn earlier.
4. Select Graphics> [395] Bring to Front [399] to bring the text page in front of the rectangle.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   124

Copyright © 2000-2006 Pixel Power Ltd.
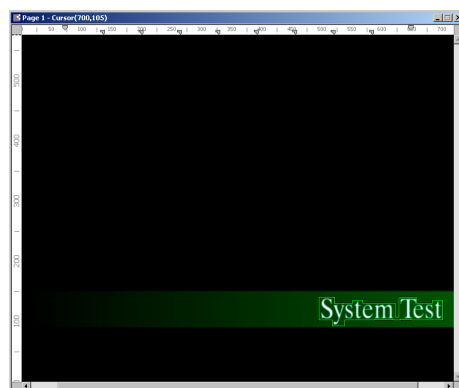
5. Move the text cursor to the front of the line using the Home key, then select <u>Text></u> [408] <u>Markers>Insert>Animation</u> [411] to insert an animation marker. The <u>Animation Marker dialog box</u> [565] is displayed.
6. In the Effect group box, select Crawl from the drop-down list box and then select OK. The animation maker is inserted at the start of line.
7. Press ESC to stop editing. The graphics are pasted down into the foreground of the page using full filtering.

Insert supplied test video clip and manipulate (OPTIONAL)

If you have purchased a clip store, you can optionally insert a clip into the page foreground to test that clip playback is fully functional.

1. Select <u>Graphics></u> [395] <u>Cels / Video>Paste Clip</u> [405]. The <u>Clarity Explorer</u> [362] is displayed.
2. Browse to the following clip depending on the video format selected earlier and the whether you have an internal or external clip store:

Clip Store	Video Format	Path
Internal	625	`<volume name>IBC 2003 625/Finance1`
	525	TBA
External	625	TBA
	525	TBA

3. With the clip selected, select OK to insert the video clip.
4. Click within the Graphic Edit window and drag the mouse pointer to draw the extent of the clip. Use mouse to position the clip on the left side of the page, level with the middle of the rectangle, as shown below.
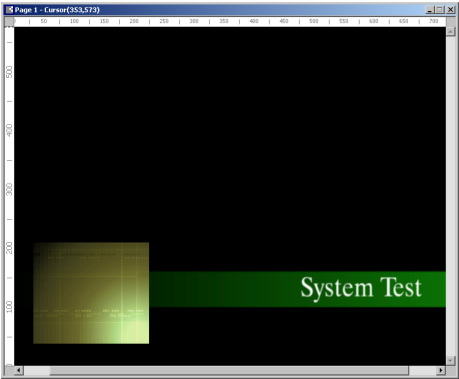
Save current job

1. Select <u>File></u> [378] <u>Save Job</u> [380]. The <u>Save Job As dialog box</u> [781] is displayed.
2. Create the following folder using normal Windows methods:

    `C:\SYSTEM_TEST`

3. Browse to the above folder and enter a name for the job relevant to you circumstances in the File Name text box.

    ```
    525_System_Test
    625_System_Test
    ```

4. Select Save to save the job.

Refer to <u>Playout page on channel A</u> [126] to test the systems' playout.

6.4.1.6 Playout page on channel A

To playout page 1 on channel A, follow the steps below:

1. Ensure that the <u>Playout Controls control box</u> $\boxed{343}$ are displayed (<u>View></u> $\boxed{421}$ <u>Playout Controls</u> $\boxed{343}$).
2. Check the Online box to go online.
3. Press 1 on the numeric keypad and then Cue (the + key on normal keyboards) to prepare page 1.
4. Press the Take button on the numeric keypad to take page 1.

The rectangle and foreground video clip are displayed first with the live source shown in the page background. The software will then animate the text onto the page from the right-hand side. To go offline, clear the Online box.

6.4.2 Software based systems

This section describes basic software configuration for Clarity PREP software.

6.4.2.1 Set default video format and aspect ratio of pages

To set the default video format and aspect ratio of pages, follow the steps below:

1. Select <u>Options></u> $\boxed{429}$ <u>User Preferences</u> $\boxed{430}$. The <u>User Preferences dialog box</u> $\boxed{809}$ appears.
2. Select the <u>Page Formats dialog tab</u> $\boxed{819}$.
3. Select the video format to match the systems' format from the Format drop-down list box.
4. Depending on your video format selection, some or all of the Aspect Ratio controls may become enabled. Select 4:3, 14:9 or 16:9 to select the desired aspect ratio to match that set for the system.

6.4.3 Optional software configuration that maybe useful

The following sections detail system configuration that may be useful after initial testing.

6.4.3.1 Automatically saving jobs

Jobs can be set to save automatically at periodic times whilst working. Auto save files for job files (.PPJ) have the .PAS file extension. Autosave .PAS and .BAK files are assigned as Windows hidden files and as such they will not be visible unless hidden files are displayed. These files can be optionally deleted when originating job files (.PPJ) are saved. Follow the steps below to configure the automatic saving of jobs:

1. Select <u>Options></u> $\boxed{429}$ <u>User Preferences</u> $\boxed{430}$. The <u>User Preferences dialog box</u> $\boxed{809}$ appears.
2. Select the <u>General dialog tab</u> $\boxed{816}$.
3. In the <u>Auto Saving group box</u> $\boxed{816}$, check the <u>On</u> $\boxed{816}$ box to turn the function on. Enter the desired the interval between which automatic saves are made in the <u>Auto Save Interval (mins) text box</u> $\boxed{714}$.
4. Optionally, to ensure that .PAS files are deleted when originating job files (.PPJ) are saved, ensure that the <u>Delete auto save file after manual save box</u> $\boxed{816}$ is checked.

6.4.3.2 Changing the graphics filtering on video outputs [CLARITY]

Only configurable when no job is currently open.

The standard filtering (HQ) has been chosen to provide high quality text as demanded by character generators. In some circumstances, less softening of edges may be required, or even no anti-aliasing at all. To provide for this, four other alternative levels of filtering can be selected.

To configure the filtering quality of any graphics shown on any pages in subsequent jobs, follow the steps below:

1. Select <u>Options></u> $\boxed{429}$ <u>User Preferences</u> $\boxed{430}$. The <u>User Preferences dialog box</u> $\boxed{809}$ appears.
2. Select the <u>Edit dialog tab</u> $\boxed{810}$.
3. Select the desired filtering option from the <u>Graphics Filter Mode group box</u> $\boxed{817}$.

6.4.3.3   Configuring page video frame rate and aspect ratio mismatch [CLARITY]

The software can be configured to enable the playback pages that do not match either the current system frame and/or the aspect ratio. To configure this setting, follow the steps below:

To configure these settings, follow the steps below:

1. Select Options> ⁴²⁹ Global Preferences ⁴³⁰. The Global Preferences dialog box ⁶⁵⁴ appears.
2. Select the Page Formats dialog tab ⁶⁶⁷.
3. On the Page Formats dialog tab ⁶⁶⁷, check or clear the respective Allow aspect ratio mismatch and Allow frame rate mismatch boxes in the Playout group box. ⁶⁶⁸

NOTE

With either of these settings turned on, you may experience kerning anomalies on text objects contained on pages that are mismatched.

6.4.3.4   Toggling the automatic creation and editing of text pages

The software can be configured to:

- create a new text page on blank pages when they are opened in the Graphic Edit window ²⁶⁰;
- edit the first text page on a page when it is opened in the Graphic Edit window.

To configure these settings, follow the steps below:

1. Select Options> ⁴²⁹ User Preferences ⁴³⁰. The User Preferences dialog box ⁸⁰⁹ appears.
2. Select the Edit dialog tab ⁸¹⁰.
3. On the Edit dialog tab ⁸¹⁰, check or clear the respective Auto create text page and Auto edit text page boxes in the Text Settings group box. ⁸¹⁴

6.4.3.5   Toggling the preview of live input on Edit outputs whilst offline [CLARITY]

You can switch whether the video supplied by the default live input is looped through and displayed by the system whilst it is offline. Follow the steps below:

1. Select Options> ⁴²⁹ Local Preferences ⁴³⁰. The Local Preferences dialog box ⁶⁹⁶ appears.
2. Select the General dialog tab ⁷¹⁴.
3. In the Loop Through Option group box, check or clear the Loop through default live input while offline box ⁷¹⁷.

6.4.3.6   Toggling the scrolling of safe areas

To toggle the scrolling of safe areas when scrolling pages within the Graphic Edit window ²⁶⁰, follow the steps below:

1. Ensure that the Graphic Edit window ²⁶⁰ is displayed (either double-click on a page in the Page Browser ²⁵¹ or select Page> ³⁹⁰ Edit Graphics ³⁹².
2. Ensure that no foreground graphics objects are selected by pressing ESC.
3. Select the Safe Area control tab ²⁹² on the Graphic Tools ²⁶⁶.
4. Check or clear the Scroll Safe Area box.

If the Scroll Safe Area box is left unchecked, safe area percentages will be maintained when scrolling pages i.e the safe area will move with the scroll.

6.4.3.7   Toggling undo and redo

The Edit> ³⁸⁴ Undo ³⁸⁵ and Edit> ³⁸⁴ Redo ³⁸⁵ commands enable actions taken whilst editing pages using the Graphic Edit window ²⁶⁰ to be reversed (Undo) or re-instated (Redo). It is recommended that you turn this option on if you are working on large amounts of text or editing text fields. To toggle the availability of undo and redo, follow the steps below:

1. Select Options> ⁴²⁹ User Preferences ⁴³⁰. The User Preferences dialog box ⁸⁰⁹ appears.
2. Select the Edit dialog tab ⁸¹⁰.
3. On the Edit dialog tab ⁸¹⁰, check or clear the On box in the Undo group box ⁸¹⁵ as desired.
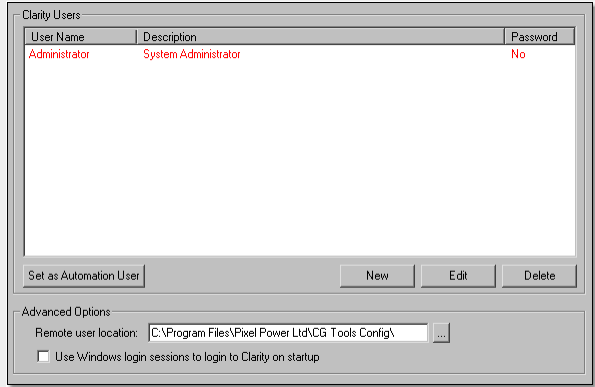
6.5 Intermediate level CG Tools user management, Clarity Server and job copy configuration (7.1.0.0)

This section outlines intermediate level user management and Clarity Server configuration.

Section	Description
Overview and implications of CG Tools user management configuration on other areas of the CG Tools software [128]	A new methodology has been introduced that has enabled us to migrate the CG Tools software to a user based software system. Introduced in version 7.1.0.0. In short, the system enables the creation and maintenance of user accounts and user account information to be stored in a centralised network repository.
Overview and implications of Clarity Server introduction on other areas of the CG Tools software [130]	A new methodology has been introduced that recommends the way in which Clarity systems and Clarity PREP systems are configured to facilitate enhanced connectivity, thus simplifying the copying of job content between systems. Introduced in version 7.0.0.4 but revised due to the introduction of user management system.
User management system feature reference [133]	Provides an insight to the various features available with the new user management system.
Example user management and Clarity Server workgroup configuration [139]	We have formulated a working practice that encompasses user/system management and Clarity server configuration with a view to improving system security, ease of use for general users when copying jobs and easier deployment of system configuration by an administrator. This example explains how to configure a workgroup of three Clarity servers [140] that will be used by three users [140] (one of which is the workgroup system administrator).
Featured XML files, basic description and tag reference (where relevant) [166]	Describes the user management XML configuration files and provides an XML tag reference where relevant.
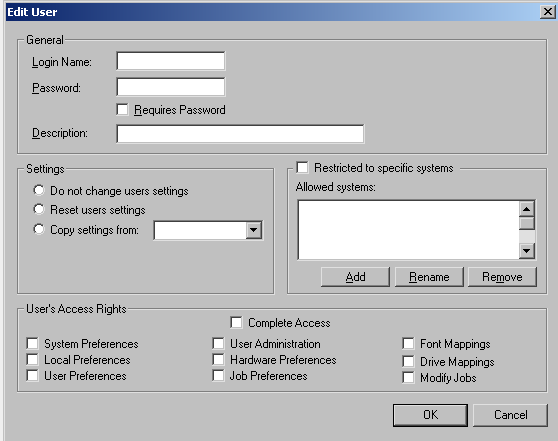
6.5.1 Overview and implications of CG Tools user management configuration on other areas of the CG Tools software

The entire new system of user and system management utilises XML and text files as the storage medium for user account and software preference information. User management is conducted using a number of new user interface components.
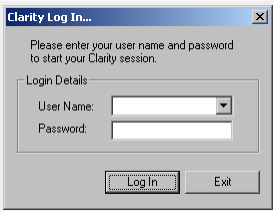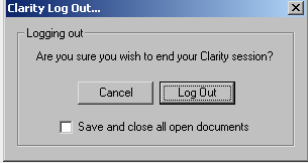
Dialog box or dialog tab	Description
	The Users dialog tab [665] on the Global Preferences dialog box [654] enables the maintenance of user settings for Clarity Servers within your workgroup.
	The controls in the Clarity Users group box enable the selection [666], addition, editing and deletion [666] of users defined for the current workgroup. Is also enables a selected user to be configured as the automation user [666].
	The controls in the Advanced Options group box enable configuration of advanced user settings including selection of whether Microsoft Windows logins are used by users to login to Clarity systems [667] and the definition of where the remote user location [666] within the Clarity Server workgroup.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   128

Copyright © 2000-2006 Pixel Power Ltd.

Dialog box or dialog tab	Description
Change Password You are currently logged in as 'Administrator' Old Password: New Password: Confirm New Password:	The Password dialog tab [825] on the User Preferences dialog box [809] can be accessed by any user (assuming they have rights to edit their own preferences). It only allows the user to change their password. The controls in the Change Password group box enable the current user to change their current password [824] to a new password [824] and confirm [824].
Edit User General Login Name: Password: ☐ Requires Password Description: Settings ○ Do not change users settings ○ Reset users settings ○ Copy settings from: Restricted to specific systems Allowed systems: Add Rename Remove User's Access Rights ☐ Complete Access ☐ System Preferences ☐ User Administration ☐ Font Mappings ☐ Local Preferences ☐ Hardware Preferences ☐ Drive Mappings ☐ User Preferences ☐ Job Preferences ☐ Modify Jobs OK Cancel	The Add/Edit User dialog box [560] enables the configuration of settings for the selected user. It is displayed after selecting Edit [666] or New [666] on the Users dialog tab [665] on the Global Preferences dialog box [654]. The controls in the General group box enable the configuration of the selected users' login name [561], password [561], user description [562] and whether the password is required for login [562]. The controls in the Settings group box enable users' settings to be copied [563], reset [563] and locked from being edited [563]. The controls in the Restricted to specific systems group box enable the addition [562], deletion [563] and renaming [563] of Clarity Servers onto which the selected user can log in to. Check the Restricted to specific systems check box to enable the maintenance of Clarity Servers. The controls in the User Access Rights group box [564] enable the configuration of what areas of CG Tools software functionality can be accessed by the selected user.

User access to the CG Tools software is conducted using a number of new user interface components.

Dialog box or dialog tab	Description
Clarity Log In... Please enter your user name and password to start your Clarity session. Login Details User Name: Password: Log In Exit	The Clarity Log In dialog box [595] enables entry of a username [595] and password [595], defined using the Add/Edit User dialog box [560]. After entry of a valid username and corresponding password, the CG Tools software can be used. Displayed when a user first starts the CG Tools software and it detects there is more than one user on the system or when the a currently active user logs out.
Clarity Log Out... Logging out Are you sure you wish to end your Clarity session? Cancel Log Out ☐ Save and close all open documents	The Clarity Log Out dialog box [596] enables a user to log out of the CG Tools software. Displayed when the File> [378] Log off [384] menu command is selected or by closing the CG Tools software application. The controls in the Logging out group box enable the selection of whether to log out or cancel the log out operation [596]. Also enables any unsaved files to be saved [596] before closing.

The introduction the CG Tools user management concept has dictated a number of changes relating to the re-appropriation of user preference settings available previously on the User Preferences dialog box and system settings available previously on the System Settings dialog box. Below is a list of the individual implications for users that are upgrading from earlier CG Tools versions.

SEE ALSO

6.5.1.1 Users upgrading from version 7.0.0.4 onwards

See the following sections:

6.5.1.1.1 Migration of user preference settings (V7.1.0.0)

There are now three different categories for CG Tools software preferences. Preferences are configured on three separate dialog boxes. These three dialog boxes replace the previous User Preferences dialog box and the System Settings dialog box.

Step	Description	Dialog box	Menu command
Global	Global company wide settings for all systems within a networked workgroup.	Global Preferences dialog box 654	Options> 429 Preferences>Global Preferences 430
Local	Local settings specifically for the current system.	Local Preferences dialog box 696	Options> 429 Preferences>Local Preferences 430
User	Settings for the user currently logged into the current system.	User Preferences dialog box 809	Options> 429 Preferences>User Preferences 430

6.5.1.1.2 Previous password system now superseded [V7.1.0.0]
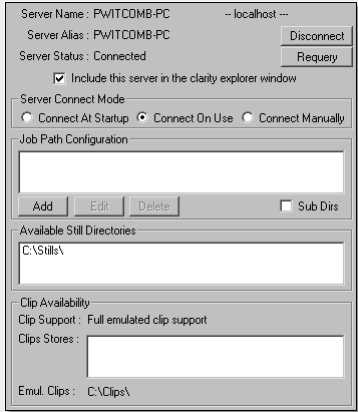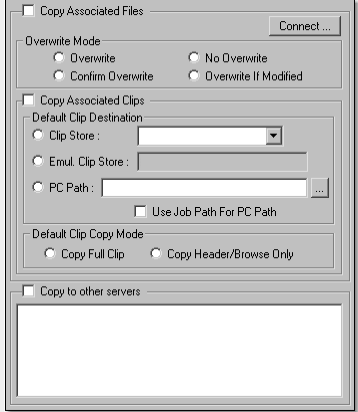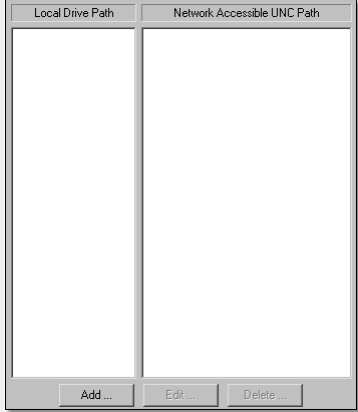
The user management functionality supersedes the system that was previously configured using the Password dialog tab on the System Preferences dialog box. As a result of this, the <password entry> dialog box has been removed and superseded by the login and log out functionality available using the Clarity Log In dialog box 595 and Clarity Log Out dialog box 596. As a result the `Passwords.ini` file is no longer used.

6.5.2 Overview and implications of Clarity Server introduction on other areas of the CG Tools software

The concept of the Clarity Server was introduced for CG Tools version 7.0.0.4 and has since been upgraded to coincide with the new user management system introduced for version 7.1.0.0 of the CG Tools software. A Clarity Server is a Clarity system or PC running the Clarity PREP software that is identified to another system using the Clarity Servers dialog tab 655 on the Global Preferences dialog box 654. Each Clarity system or Clarity PREP PC stores configuration information, both about itself, and other Clarity Servers that have been made known to it. This information includes settings which indicate the directories used for storing jobs and job related content on that machine.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   130

Copyright © 2000-2006 Pixel Power Ltd.

Dialog box or dialog tab	Description
	Configuration of drive mappings that will subsequently enable remote Clarity Servers to access job content via network accessible UNC (Universal Naming Convention) paths.
	Configuration of job copy settings for the selected Clarity Server including how associated files are copied [658] (in particular how clips are copied) and whether jobs are copied to other available Clarity Servers [659] at the same time.
	Configuration of Clarity Server properties including whether a server is shown in the Clarity Explorer [661], how a server is connected to [663] and server job paths [661]. Also displays the available still store directories [660] and physical/emulated clip store availability [660] when a server is connected.

This configuration information is stored in an XML file called `ClarityServers.XML` [167]. For each Clarity Server you can:

- see all of its settings e.g. stills directories, clip volumes, connection status etc.;
- setup the rules used for copying jobs and content to that server;
- setup how the local drives on that server are found on the network.

Additionally, each Clarity Server can be given an alias, allowing for more meaningful names. A server can be listed more than once with differing aliases, with each alias having a different configuration e.g. one where clips are copied, one where they are not. The concept behind this system of working is that this information is configured once by a system administrator when the systems are installed, and then general users/operators never need worry about it.

NOTE

We strongly recommend that you first read the sections relating to the Copy Clarity Job dialog box 605 **and the Clarity Severs dialog tab** 655 **on the Global Preferences dialog box** 654 **before reading the Example user management and Clarity server workgroup configuration** 139 **section.**

SEE ALSO

Users upgrading from version previous to 7.0.0.4 132
Users upgrading from version 7.0.0.4 onwards 132
User management system features reference 133
Example user management and Clarity server workgroup configuration 139

6.5.2.1   Users upgrading from version 7.0.0.4 onwards

See the following sections:

Migration of Clarity server settings (V7.1.0.0) 132

6.5.2.1.1   Migration of Clarity server settings (V7.1.0.0)

The Clarity Servers dialog tab 655 is now located on the Global Preferences dialog box 654. Was previously located on the User Preferences dialog box.

6.5.2.2   Users upgrading from versions previous to 7.0.0.4

See the following sections:

Removal of remote clip stores and multiple destination copy configuration (V7.0.0.4) 132
Improved functionality of the Clarity Explorer (V7.0.0.4) 132
Revisions to the Copy Clarity Job dialog box (V7.0.0.4) 132

6.5.2.2.1   Removal of remote clip stores and multiple destination copy configuration (V7.0.0.4)

The introduction of the Clarity Server concept has made some areas of system and job copying configuration redundant. These include the removal of:

- remote clip stores configuration (previously available from the Remote Clip Stores dialog tab on the User Preferences dialog box);
- multiple destination copy configuration (previously available on the Copy Clarity Job dialog box 605).

6.5.2.2.2   Improved functionality of the Clarity Explorer (V7.0.0.4)

The introduction of the Clarity Server concept has enabled improved functionality of the Clarity Explorer. As a brief guide:

- the Clarity Explorer 362 now shows remote clarity content for each server configured using the Clarity Severs dialog tab 655 on the Global Preferences dialog box 654. Each server has its own entry in the Clarity Explorer window, where clips, emulated clips, stills and jobs can all be browsed;
- you can now copy job content by copying and pasting job files between job folders/directories using the Clarity Explorer window;
- implemented speed fixes, directory copy fixes, automatic detection of remote device closure, and automatic attempts to reconnect to remote devices when requested;
- emulated clip stores are now visible within the Clarity Explorer, allowing Clarity PREP users to work with clip content within jobs, in the same way as a full Clarity system.

6.5.2.2.3   Revisions to the Copy Clarity Job dialog box (V7.0.0.4)

The introduction of the Clarity Server concept has enabled the revision of the Copy Clarity Job dialog box 605. As a brief guide, for each extra destination, the user can specify rules that indicate what should be done with clips. Automatic extra destinations can now be configured for servers, and/or extra destinations can be picked manually using the Basic dialog tab 612 on Copy Clarity Job dialog box 605. There are now three dialog tabs available on the Copy Clarity Job dialog box, as described below:

- the Basic dialog tab 612 provides users with a simpler interface for copying job content to one or more

destination machines. This copy process uses the information that has already been configured in the Clarity Severs dialog tab [655] on the Global Preferences dialog box [654];

- the Package dialog tab [614] enables users to specify that a job and its entire contents be copied into a single directory and optionally packaged into a ZIP archive. This packaged job contains special information that then allows the directory to be copied anywhere onto any system and the job can be subsequently loaded without any problems;

- the Advanced dialog tab [606] features the more complex, but inherently flexible user interface, available with previous versions of the Copy Clarity Job dialog box. It enables the specification of job copy attributes in the same manner as older versions of the Copy Clarity Job dialog box, but without the availability of multiple destination copy configuration (this is now dictated by the Clarity Server configuration);

6.5.3   User management system feature reference

This section provides an insight to the various features available with the new user management system and should be read in conjunction with the Example user management and Clarity Server workgroup configuration [139] section.

Step	Description
Automatic login if only a single user is specified [134]	By ensuring that only one user account is defined, this account will be logged in automatically when a CG Tools application is started.
Backing up user management XML files [134]	When a user logs into the CG Tools software, it reads the required files from the Remote user management location [137] and creates a backup on the local machine in the Local user management location [137].
CG Tools software start-up [134]	When the CG Tools starts up, it always checks to see if the Remote user management location [137] is different from the Local user management location [137]. If the Remote user management location is NOT different to the Local user management location (see System invisibility on single user systems [138]), the CG Tools software assumes that you want to run in a single user mode, and thus the CG Tools software will not action the file copying process.
Defining the Automation user [135]	A special flag can be applied to any user account, marking the account as the one that shall be used to log into the CG Tools software when the software is under automation control.
Files used by the user management system [135]	The entire new system of user and system management utilises XML and text files as the storage medium for user account and software preference information.
Logging into the user management system [136]	Defined users can log into the CG Tools software using the Clarity Log In dialog box [595] if circumstances permit.
Logging out of the user management system [136]	Defined users can log out into the CG Tools software using the File> [378] Log Off [384] menu command and the Clarity Log Out dialog box [596] if circumstances permit.
Maintaining user settings [137]	Because all user settings and their respective current CG tools configurations are now stored centrally, it is possible to administer these user settings (reset, copy from another user etc.).
Password encryption [137]	User passwords stored by the user management system are encrypted to maintain security.
Remote and Local user management locations [137]	On each Clarity Server there is a Local user management location that is defined when the CG Tools software is first started where the user management XML and text files are created. This location cannot be changed. This location is then used as the path for the Remote user management location. Remote files are copies of those same XML and text files that are stored the Local user management location, but they are stored in a directory location specified by the user (usually the system administrator) in a network location that can be accessed by all systems within a proposed network workgroup. This location can be changed using the Remote user location text box [666] in the Advanced Options group box [666] on the Users dialog tab [665] of the Global Preferences dialog box [654].
Restricting users to specific Clarity Servers [137]	It is possible to allow specific user accounts to have access to specific Clarity Servers within a workgroup.

Step	Description
Storing settings after logging out or exiting the CG Tools software [138]	To maximise efficiency every time settings are changed, the files are loaded during CG Tools initialisation and new versions saved after logging out or closing the CG Tools software. In circumstances where two users have loaded the `Global.xml` [170] file, and a user subsequently adds or changes settings, because they have already loaded a previous version of the `Global.xml` [170] file, when the second user attempts to save the file, it will overwrite any changes made in the first one. To reduce the chances of losing data, the user management system merges settings.
User management invisibility on single user systems [138]	Enables new installations of the CG Tools software V7.1.0.0> to login in transparently using a single default user account and thus operate in the same way as previous versions of the CG Tools software.
Using Microsoft® Windows® logins [138]	The user management system can be configured to log users into the CG Tools software using their Microsoft® Windows® account details.
Visibility of user account name within GUI [139]	The name of the user currently logged into the current CG Tools session is visible in a number of areas within the Graphical User Interface (GUI)

6.5.3.1 Automatic login if only a single user is specified

If there is only one user defined in the `Users.xml` file (usually the Administrator), then they will be logged in automatically when a CG Tools application is started and the Clarity Log In dialog box [595] will not be displayed. The File> [378] Log Off <username> [384] command will not be visible either, until the Administrator user has defined more than one user.

6.5.3.2 Backing up user management XML files

When a user logs into the CG Tools software, the software tries to read the files stored in the Remote user management location [137]. If the location can be found, it will the read the required files and create a backup on the local machine in the Local user management location [137]. If the software cannot open any of the required files stored in the Remote user management location [137], it will see if there is an available version already on the local machine in the Local user management location [137]. If there is a valid local version of the required file(s), it will use those file(s) temporarily. However, the CG Tools software will not permit any changes to be made to the settings stored in these files. You must solve the access problems surrounding the accessibility of the Remote user management location [137] before you can edit any user management settings.

SEE ALSO

CG Tools software start-up [134]

6.5.3.3 CG Tools software start-up

When the CG Tools software initialises, it always checks to see if the Remote user management location [137] is different from the Local user management location [137].

If the Remote user management location is NOT different to the Local user management location (see User management invisibility on single user systems [138]), the CG Tools software assumes that you want to run in single user mode, and thus the CG Tools software will not action the file copying process.

If the Remote user management location IS different to the Local user management location, the following files are copied to the Local user management location:

```
Local.xml          [171]
Users.xml          [172]
ClarityServers.xml [167]
RemoteFTPMachines.cfg
```

If the copy procedure fails, then the CG Tools software will go onto an offline mode (see Backing up of user management XML files) [134]. The main reason for this is if the Remote user management location is unavailable and a message will be displayed stating this.

6. Getting started
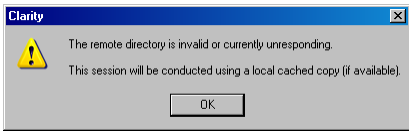
Intermediate level CG Tools user management, Clarity Server and job copy configuration (7.1.0.0)

This message is displayed in circumstances where the Remote user management location cannot be accessed. This may be due to:

- transient networking problems;
- the system hosting the Remote user management location is not on the same domain as the current Clarity Server;
- the shared folder used as the Remote user management location has not been shared correctly or the read/write permissions have not been configured correctly.

This means that the files located in the Local user management location will be used. This results in the controls on the Users dialog tab ⌐665⌐ on the Global Preferences dialog box ⌐654⌐ being unavailable (greyed out). The following message will also appear at the bottom of the dialog tab

```
You are currently editing a local copy of the users file.
To administer the central users list, please re-start Clarity to re-load the users list.
```

In this situation, at no point will the above files be copied back to the Remote user management location and user accounts CANNOT be modified at all.

NOTE

A present if the user holds down the right shift key at startup, it will operate in a single user mode.

SEE ALSO

Backing up of user management XML files ⌐134⌐

6.5.3.4   Defining the Automation user

It is possible for users to control the CG Tools software using external applications. When an external application tries to connect to the CG Tools software, it checks to see if there is a user logged in. It also checks the access rights of the current user to make sure that they have write access to jobs. If neither of these are applicable, the CG Tools software will log the current user out, and log in as the Automation user. When creating user accounts, only one user account can be specified to be automatically logged in when required by a controlling application. A user can be designated as the Automation user using the Set as Automation User ⌐666⌐ button on the Users dialog tab ⌐665⌐ on the Global Preferences dialog box ⌐654⌐.

6.5.3.5   Files used by the user management system

The entire new system of user and system management utilises XML and text files as the storage medium for user account and software preference information. The following files are those that are used by the user management system when a CG Tools software installation is completed.

XML file	Description
`Administrator.xml` ⌐166⌐	Stores user configuration settings specifically for the system administrator.
`ClarityServers.xml` ⌐167⌐	Stores Clarity Server information for the current workgroup.
`Global.xml` ⌐170⌐	Stores settings for all systems within a networked workgroup. Configured using the Video dialog tab on the Global Preferences dialog box ⌐654⌐.
`Local.xml` ⌐171⌐	Stores local settings specifically for the current system.
`LogFile.xml` ⌐171⌐	Keeps track of changes made to the user management system e.g. writing of updated preferences etc.
`Users.xml` ⌐172⌐	Stores user account information including display name, internal name, password (encrypted) etc.

In addition to the above XML files, for each additional user that is added to the user management system, an XML file is created:

135   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

XML file	Description
`<username>.xml` [166]	Stores user configuration settings for each individual user where `<username>` is the name of the user as specified on the Add/Edit User dialog box [560].

The following text files are those that are used by the user management system when a CG Tools software installation is completed.

Text file	Description
`RemoteFTPMachines.cfg`	Stores FTP locations.

6.5.3.6 Logging into the user management system

The Clarity Log In dialog box [595] is displayed in the following situations:

a) when a user first starts the CG Tools software and the software detects that there is more than one user defined in the user management system (by interrogation of the `Users.xml` [172] file);

b) when the currently active user logs out [136].
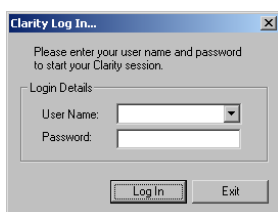
It is NOT displayed in the following situations:

- when there is only one user defined [134] in the `Users.xml` [172] file (usually the Administrator) and the CG Tools software is started;
- when the CG Tools software is instructed to login as the defined Automation user [135] when under the control of an automation system.

This dialog box enables the user to enter their login name and password (as defined on the Add/Edit User dialog box [560]). The User Name [595] text box autocompletes, so if the user enters some of the letters of a user that has previously logged on, it will show these user(s). If the user does not want to log in, they can exit the CG Tools software by selecting Exit [596]. Upon the user logging on, if the CG Tools software is not utilising the user management data stored in the Local user management location [137], it will try to copy the relevant user file from the Remote user management location [137].

The software then loads and applies all the user settings from the local `Users.xml` [172] file.

NOTE

User passwords are case insensitive.

6.5.3.7 Logging out of the user management system

Users can log out of the CG Tools software using the File> [378] Log off [384] menu command or by closing the CG Tools software application. The File> [378] Log off [384] menu command is only visible if the user is in a position to be able to log out. The File> [378] Log off [384] command will not be available when:

a) a user is logged in to an account using a Microsoft® Windows® login [138];

b) the user is the only one defined within the user management system (see System invisibility on single user systems) [138].

After selecting the File> [378] Log Off [384] menu command, the Clarity Log Out dialog box [596] is displayed asking the user to confirm that they want to log out.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   136

Copyright © 2000-2006 Pixel Power Ltd.
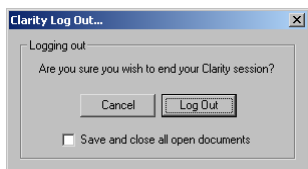
If the user checks the Save and close all open documents box |596|, when the Log Out button |596| is selected, all open jobs and associated files are saved, all user interface components are closed and the Clarity Log In dialog box |595| is displayed. If the Save and close all documents box is cleared, then any jobs that are open are left open, along with any jobs that are currently being played out etc., and the Clarity Log In dialog box |595| is displayed.

6.5.3.8   Maintaining user settings

Because all user settings and their respective current CG tools configurations are now stored centrally, it is possible to administer these user setting using the controls in the Settings group box |563| on the Add/Edit User dialog box |560|. For each user, it is possible to:

- leave settings unchanged (by selecting the Do not change users settings |563| option);
- reset settings (by selecting Reset users settings |563| option), thus removing any user specific options that have been set previously, and returning their settings to the CG Tools software defaults;
- copy settings from another user account (by selecting the Copy settings from |563| option and selecting a user account from the adjacent drop-down list box).

All new user accounts must be selected to either copy or have their settings reset when an account is created.

6.5.3.9   Password encryption

The passwords within the `Users.xml` |172| file are encrypted to maintain security. However, should a user forget their password for their account, then the Administrator has the necessary rights to change them. Should the Administrator forget their password, they can email the `Users.xml` |172| file to Pixel Power Technical Support |103| who will decrypt the required password(s).

6.5.3.10   Remote and Local user management locations

On each Clarity Server there is a Local user management location that is defined when the CG Tools software is first started where the user management XML and text files are created. The default location is:

`C:\Program Files\Pixel Power Ltd\CG Tools Config`

This location cannot be changed. This location is then used as the path for the Remote user management location. Remote files are copies of those same XML and text files that are stored the Local user management location, but they are stored in a directory location specified by the user (usually the system administrator) in a network location that can be accessed by all systems within a proposed network workgroup. This location can be changed using the Remote user location text box |666| in the Advanced Options group box |666| on the Users dialog tab |665| of the Global Preferences dialog box |654|.

After specifying a new Remote user management location over the default location, when the CG Tools software is closed, the files are copied from the Local user management location to the new Remote user management location. Subsequently starting the CG Tools software will result in all the relevant files being copied from the Remote user management location to the Local user management location, so that as a user moves between Clarity Servers, the settings will remain the same.

6.5.3.11   Restricting users to specific Clarity Servers

It is possible to allow specific user accounts to have access to specific Clarity Servers within a workgroup. For example, you may want to limit graphic artists to only have access to Clarity Servers that have been tasked as content creation systems (systems running the Clarity PREP software). A user account can be restricted to specific Clarity Servers using the controls in the Restricted to specific systems check box and group box |562| on the Add/Edit User dialog box |560|. Defined system names relate to the Windows machine name. When a user tries to log into the CG Tools software, it will check if the user account is restricted, and if so, compare the current system name to the restriction list. If the current computer name is NOT in the list, then it will not allow the user to log on.

SEE ALSO

Users.xml [172]
Users.xml tag reference [172]

6.5.3.12 Storing settings after logging out or exiting the CG Tools software

When a user logs out or exits the CG Tools software, the software will write:

- a local copy of the `Users.xml` [172] file which is written to the default Local user management location [137] and then copied to the Remote user management location [137];
- a local copy of the `Global.xml` [170] file which is written to the default Local user management location [137] and then copied to the Remote user management location [137];
- a local copy of the `Local.xml` [171] file which is written to the default Local user management location [137].

To maximise efficiency every time settings are changed, the files are loaded during CG Tools initialisation and new versions saved after logging out or closing the CG Tools software.

In circumstances where two users have loaded the `Global.xml` [170] file, and a user subsequently adds or changes settings, because they have already loaded a previous version of the `Global.xml` [170] file, when the second user attempts to save the file, it will overwrite any changes made in the first one.

To reduce the chances of losing data, the user management system operates in the following manner:

a) rather than changing settings in the `Global.xml` [170] file directly, the CG Tools software stores a list of changes;
b) after exiting the CG Tools application, the `Global.xml` [170] file settings are loaded (in case of any changes made whilst the CG Tools application was running), and the changes merged;
c) after the merged `Global.xml` [170] file has be written to disk, and entry is made in the `LogFile.xml` [171] file, detailing the write process.

If anything has gone wrong, this process ensures that there is always a safe, reliable version of the `Global.xml` [170] stored on the Clarity Server that last wrote it.

6.5.3.13 User management invisibility on single user systems

The first time a user runs the CG Tools software, the software will check to see if there has been a Remote user management location configured using the Remote user location text box [666] in the Advanced Options group box [666] on the Users dialog tab [665] on the Global Preferences dialog box [654]. If the Remote user management location has not been defined, it will reference the default Local user management location [137] where the user management XML and text files are created (`C:\Program Files\Pixel Power Ltd\CG Tools Config`).

The CG Tools software will also create a default Administrator user account (by creating the `Administrator.xml` file) in the Local user management location. This account is created without a password so that it can be used to log onto the CG Tools software on that system. Because it is defined as the only user on that system, the Clarity Log In dialog box [595] will NOT appear and the CG Tools software will start normally as per pre-CG Tools V7.1.0.0 software.

SEE ALSO

Visibility of user account name within GUI [139]

6.5.3.14 Using Microsoft® Windows® logins

The user management system can be configured to log users into the CG Tools software via their Microsoft® Windows® account login. If the Administrator has checked the Use Windows login sessions to login to Clarity on startup check box [667] in the Advanced Options group box [666] on the Users dialog tab [665] on the Global Preferences dialog box [654], when the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the `Users.xml` [172] file, then CG Tools will login transparently using that user account.

NOTE

Transparent login only occurs if the Requires password box [562] on the Add/Edit User dialog box [560] is cleared for that user account.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   138

Copyright © 2000-2006 Pixel Power Ltd.

6.5.3.15 Visibility of user account name within GUI

The name of the user currently logged into the current CG Tools session is visible in a number of areas within the Graphical User Interface (GUI):

- in the Status bar [249] at the bottom of the Main application window [246];
- in the File menu as part of the File> [378] Log Off <username> [384] command;
- on the Playout Controls control box [343];
- on the About dialog box [558].

6.5.4 Example user management and Clarity Server workgroup configuration

We have formulated a working practice that encompasses user/system management and Clarity server configuration with a view to improving system security, ease of use for general users when copying jobs and easier deployment of system configuration by an administrator.

Section	Description
Overview [139]	Describes Clarity Servers and user management system accounts defined for the example workgroup. Also includes a graphical representation of the example.
Create and share Remote user management location folder on networked machine (Pixel-p4-02) (1) [142]	Create a location on a networked machine that is visible from all other Clarity Servers on the same network.
Configure new user accounts (2) [143]	Configure the three user accounts from a single Clarity Server in the workgroup.
Configure Remote user management location on other servers in workgroup (ClarityPREP2/Clarity-300) (3) [151]	Configure the Clarity-300 and ClarityPREP2 servers to start using the Remote user management location.
Clarity Server host configuration (to be completed individually on all Clarity Servers in the workgroup) (4) [155]	Configure Clarity Server clip store, emulated clip store and still store locations on each server individually.
Clarity Server drive mapping and job path/copy configuration (to be completed on a single Clarity Server in the workgroup) (5) [161]	Configure Clarity Server drive mapping, job paths and job copy settings using a single Clarity Server in the example workgroup.
Example ClarityServers.xml file server definitions for current workgroup [164]	Review example Clarity Servers definitions stored within the example `ClarityServers.xml` file.

6.5.4.1 Overview

This example explains how to configure a workgroup of three Clarity servers [140] that will be used by three users [140] (one of which is the workgroup system administrator).

This procedure should be completed by the person designated as the system administrator.

Section	Description
Featured Clarity Servers and requirements [140]	Clarity Servers featured in the example Clarity Server workgroup.
Other required systems on the same network [140]	Other systems required by the example Clarity Server workgroup.
Featured users and their details [140]	Users defined for the example user management system.
Graphical representation of Clarity Server workgroup and user management system details [141]	Graphical representation of the Clarity Server workgroup.
Important requirements and information before continuing [142]	YOU MUST READ THIS SECTION BEFORE CONTINUING WITH THE EXAMPLE.

6.5.4.1.1 Featured Clarity Servers and requirements

The following Clarity Servers will be featured in this example:

Server name (DNS)	Description	Purpose
Clarity-300	Clarity 300 system unit running the Clarity software derivative with video and audio clip capability and internal clip storage.	Playout system.
ClarityPREP1	Standard PC running Clarity PREP software derivative.	Content creation.
ClarityPREP2	Standard PC running Clarity PREP software derivative.	Content creation.

6.5.4.1.2 Other required systems on the same network

The following systems in addition to the [featured Clarity Servers](#) 140 will be required in this example:

Machine name (DNS)	Description	Purpose
Pixel-p4-02	Backed up network machine accessible by all other Clarity Servers (i.e. on the same network domain) that will act as the remote location for the user management XML configuration files. These files are written and copied to and from Clarity Servers in the same workgroup. **No CG Tools software is required to be installed on this system.**	Remote user management location.

6.5.4.1.3 Featured users and their details

The following users will be created and configured for this example:

User name	Password	Description
Administrator	c00per	User management and server administrator who has the ability to manage server configuration and user accounts for the Clarity Server workgroup.
Pwitcomb	p0rsche	First named user for workgroup.
Chopkin	aud1	Second named user for workgroup.

6. Getting started

6.5.4.1.4   Graphical representation of Clarity Server workgroup and user management system details

6.5.4.1.5   Important requirements and information before continuing

The following important requirements should be noted before continuing:

- all Clarity Servers should be running CG Tools software version 7.1.0.0 or later;
- all Clarity Servers and other required systems should be on the same Microsoft® Windows® network;
- all information about the availability of clip stores, emulated clips stores and level of clip acceptance is queried each Clarity Server using COM/DCOM. Therefore, pulling of clips from a clip store or pushing of clips to a clip store or emulated clip store is only possible when a COM/DCOM connection is possible. The DCOM settings on all Clarity Servers within the workgroup must be configured correctly. Please refer to the following sections for more information:

  Important information 1059
  Enabling DCOM for the CG Tools software application on HOST systems 1068

- user account names and password are NOT case sensitive.

6.5.4.2   Create and share Remote user management location folder on networked machine (Pixel-p4-02) (1)

The first step is to create a location on a networked machine that is visible from all other Clarity Servers on the same network. So for this example, we need to create and share a folder on Pixel-p4-02 140.

Follow the steps below:

1.   Browse the local hard disk using Windows Explorer.
2.   With the folder structure for the local hard disk viewed within Windows Explorer, right-click in the right-hand pane and select New>Folder from the shortcut menu.
3.   Enter a new folder name. For this example we will name the folder `RemoteUserLocation`.
4.   Right-click on the `RemoteUserLocation` folder and select Sharing and Security. The Properties dialog box is displayed with the Sharing dialog tab selected.
5.   Select the Share This Folder option.
6.   Leave the Share Name as `RemoteUserLocation`.
7.   Add a comment if desired using the Comment text box.
8.   Set the User limits as desired (we recommend using the default Maximum allowed setting).
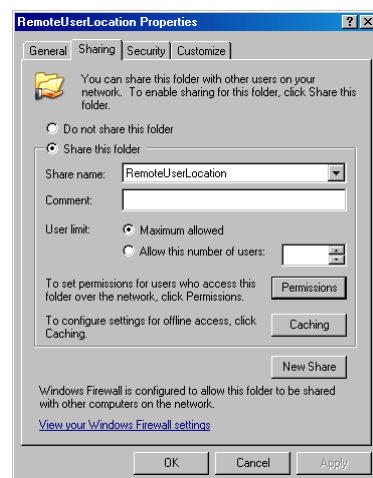
9.   Select the Permissions button. The Permissions dialog box is displayed. By default, Microsoft Windows will configure the shared folder to have read-only access and you will have to manually define write permissions for the folder to enable XML files to be written and read.
10.   Ensure that the Everyone user type is selected in the Group or user names list box.
11.   Ensure that the Full Control, Change and Read boxes are set to Allow. This setting will enable all users on Clarity Servers in the workgroup to read and write data to XML files stored in the `RemoteUserLocation` folder.
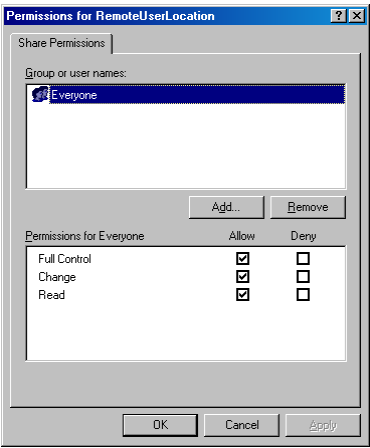
12. Select OK to close the Permissions dialog box and return to the Properties dialog box.
13. Select OK to close the Properties dialog box. Notice now that the `RemoteUserLocation` folder displays that it is a shared folder by a change of icon.

6.5.4.3 Configure new user accounts (2)

This section features the following steps and should be completed on a single Clarity Server in the workgroup:

Step	Description
Identify the machine on which you administer the new user accounts (A) [143]	Any one of the three Clarity Servers in the example workgroup can be used to administer user accounts.
Login into Microsoft® Windows® on ClarityPREP1 with administrator rights (B) [144]	Enables access to necessary functionality.
Start CG Tools software on ClarityPREP1 (C) [144]	Enables configuration.
Configure Remote user management location for ClarityPREP1 (D) [145]	In order for the ClarityPREP1 server to start using the Remote user management location, we have to configure the CG Tools software with the location.
Defining that Windows login sessions are used to login to CG Tools on startup (OPTIONAL) (E) [146]	At this stage you need to optionally decide whether you want to use Microsoft® Windows® logins to log into each CG Tools session that is started on respective Clarity Servers in the workgroup.
Configure CG Tools desktop and user preferences for the Administrator user account (OPTIONAL) (F) [147]	Optionally configure the CG Tools desktop layout and edit user preferences for the Administrator account.
Configure Administrator user account (G) [147]	The first user out of the three that we need to configure is the Administrator.
Add and configure Pwitcomb account (H) [148]	The second user out of the three that we need to add and then configure is the account for the Pwitcomb user.
Add and configure Chopkin account (I) [149]	The third and final user out of the three that we need to add and then configure is the account for the Chopkin user.

6.5.4.3.1 Identify the machine on which you administer the new user accounts (A)

Any one of the three Clarity Servers in the example workgroup can be used to administer user accounts. For this example, we will use the ClarityPREP1 server [140].

6.5.4.3.2 Login into Microsoft® Windows® on ClarityPREP1 with administrator rights (B)

Follow the steps below

1. Start the ClarityPREP1 server in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges (e.g. Administrator).

3. Ensure that you are logging on to the same domain as the other Clarity Servers in your workgroup.

Continue to

6.5.4.3.3 Start CG Tools software on ClarityPREP1 (C)

Follow the steps below

1. Start the Clarity PREP software by double-clicking on the Clarity PREP 7.1 icon on the desktop.

The first time that the CG Tools software runs, you are logged into the CG Tools software as the Administrator user. This login operation is totally The configuration files that already exist in the are to used to configure the current session.

Continue to

SEE ALSO

6.5.4.3.4   Configure Remote user management location for ClarityPREP1 (D)

Although we have created a folder on a networked system that will act as the Remote user management location (RemoteUserLocation [142] on Pixel-p4-02) [140], the current Clarity Server (ClarityPREP1) does not yet know of that location and is currently using the default Local user management location [137] to read and write user management XML and text files [135] to and from. In order for the ClarityPREP1 server to start using the Remote user management location, we have to configure the CG Tools software with the location.

Follow the steps below:

1. Select Options> [429] Preferences>Global Preferences [430]. The Global Preferences dialog box [654] is displayed.
2. Select the Users dialog tab [665].
3. In the Remote user location text box [666], enter the path to the Remote user location that you defined earlier. So, for this example, the path would be:

       \\Pixel-p4-02\RemoteUserLocation

   Alternatively, use the adjacent Browse button to browse the network for the desired system and shared folder on that system.

4. Select OK to close the Global Preferences dialog box [654].
5. The Missing Drive Mappings dialog box [738] may be displayed informing you that there are missing drive mappings.

   This is not a problem at this stage of the configuration and suitable steps will be taken during the configuration of Clarity Servers (see Clarity Server configuration (applies to all Clarity Servers in workgroup) (4) [155] to solve the problem.

6. Select OK to close the Missing Drive Mappings dialog box [738].

   There should be a pause whilst the system tries to access the remote location. The following error message may be displayed:

This message is displayed in circumstances where the Remote user management location cannot be accessed. This may be due to:

- transient networking problems;
- the system hosting the Remote user management location is not on the same domain as the current Clarity Server;
- the shared folder used as the Remote user management location has not been shared correctly or the read/write permissions have not been configured correctly.

Once the Remote user management location has been accessed, the following configuration files are written to the Remote user management location (`RemoteUserLocation` 142 on Pixel-p4-02) 140:

- the `Administrator.xml` 166 file is created containing the CG Tools default configuration for the system administrator;
- the `ClarityServers.xml` 167 file is created containing a profile for the ClarityPREP1 server;
- the `Global.xml` 170 file is created containing preferences for all future Clarity Servers within the networked workgroup;
- the `LogFile.xml` 171 file is created containing a log of recent changes made to the user management system;
- the `Users.xml` 172 file is created containing a CG Tools default profile for the system administrator;
- the RemoteFTPMachines.cfg file is created, ready for the designation of FTP locations that are available to the workgroup.

Continue to Defining that Windows login sessions are used to login to CG Tools on startup (OPTIONAL) (E) 146.

6.5.4.3.5 Defining that Microsoft® Windows® login sessions are used to login to CG Tools on startup (OPTIONAL) (E)

At this stage you need to optionally decide whether you want to use Microsoft® Windows® logins to log into each CG Tools session that is started on respective Clarity Servers in the workgroup. With this option turned on, when the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the `Users.xml` 172 file, then CG Tools will login transparently using that user account.

Transparent login only occurs if the Requires password box 562 on the Add/Edit User dialog box 560 is cleared for that user account. If this box was checked for the user account in question, then the Clarity Log In dialog box 595 will appear, ready for entry of an appropriate username and defined password.

Please note that Microsoft® Windows® passwords and passwords for CG Tools user accounts have no relation whatsoever.

To define that Microsoft® Windows® login sessions are used to log into the CG Tools software on startup, follow the steps below:

1. Select Options> 429 Preferences>Global Preferences 430. The Global Preferences dialog box 654 is displayed.
2. Select the Users dialog tab 665.
3. In the Advanced Options group box 666, ensure that the Use Windows login sessions to login to Clarity on startup check box 667 is checked.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   146

Copyright © 2000-2006 Pixel Power Ltd.

4. Select OK to close the Global Preferences dialog box 654.
5. The Missing Drive Mappings dialog box 738 may be displayed informing you that there are missing drive mappings.

This is not a problem at this stage of the configuration and suitable steps will be taken during the configuration of Clarity Servers (see Clarity Server configuration (applies to all Clarity Servers in workgroup) (4) 155 to solve the problem.

6. Select OK to close the Missing Drive Mappings dialog box 738.
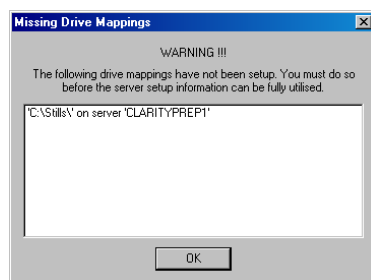
There should be a pause whilst the system tries to write to the remote location.

Continue to Configure CG Tools desktop and user preferences for Administrator user account (OPTIONAL) (F) 147

6.5.4.3.6 Configure CG Tools desktop and user preferences for the Administrator user account (OPTIONAL) (F)

Now that you have configured the Remote user management location and optionally defined to use Microsoft® Windows® login sessions, you can optionally configure the CG Tools desktop layout and edit user preferences for the Administrator account.

This is useful if you have a house style that dictates how the CG Tools user interface should appear for new user accounts. CG Tools user interface settings and user preferences are stored in an XML file dedicated to that particular user and named using the user account name. So for the Administrator user account, the settings are stored in the `Administrator.XML` 166 file. So, once you are happy with settings configured for the Administrator, you can save them and them use them as a basis when creating new user accounts.

Follow the steps below:

1. Configure and manipulate the CG Tools graphical user interface components to suit your preference. See Graphical User Interface (GUI) tour for more information 245.
2. Select Options> 429 Preferences>User Preferences 430. The User Preferences dialog box 809 is displayed.
3. Using the visible dialog tabs (except for the Password dialog tab), configure the user settings as desired.
4. Select OK to close the User Preferences dialog box 809.

Continue to Configure Administrator user account (G) 147.

6.5.4.3.7 Configure Administrator user account (G)

The first user out of the three that we need to configure is the Administrator. We are currently logged to ClarityPREP1 as the Administrator by default. Follow the steps below:

1. Select Options> 429 Preferences>Global Preferences 430. The Global Preferences dialog box 654 is displayed.
2. Select the Users dialog tab 665.
3. Ensure that the Administrator is selected in the <users> list box 666.
4. Select the Edit button 666. The Add/Edit User dialog box 560 dialog box is displayed.
5. The login name shown in the Login Name text box 561 is NOT configurable for the Administrator user.
6. The password shown in the Password text box 561 is the default system override password. Enter a new password for the Administrator account that will be used from this point onwards. For this example we shall use the following password comprising of alphabetic and numeric characters (this is always good practice).

   c00per

   The default system override password was not required during login to the current CG Tools session as the Requires password box 562 was not checked by default for the Administrator user profile. The system override password can be used by a system administrator to login into a CG Tools session with administrator privileges,

even if a password and username has been forgotten or re-configured by another user. For reasons of security, this password can only be obtained from Pixel Power technical support by an identified system administrator. So for future, secure configuration and management of a CG Tools user management system, you need to enter a new password for the Administrator account, known only to you, that will be used from this point onwards to manage user accounts and settings.

7. To ensure that the new password is required when a user tries to log in to a CG Tools session using the Administrator profile (to obtain administrator privileges), ensure that the Requires Password box 562 is checked.
8. If desired, you can edit the description for the Administrator, but for this example we shall use the default description (System Administrator).
9. In the Settings group box 563, ensure that the Do not change users settings 563 option is selected. This ensures that current CG tools configuration (configured in Configure CG Tools desktop and user preferences for Administrator user account (OPTIONAL) (F) 147), is left unchanged and is NOT reset back to the CG Tools application defaults.
10. Ensure that the Complete Access box is checked in the User's Access Rights group box 564, enabling access to all areas of CG Tools functionality. This is the default setting for the Administrator.
11. Select OK to close the Add/Edit User dialog box 560 dialog box.
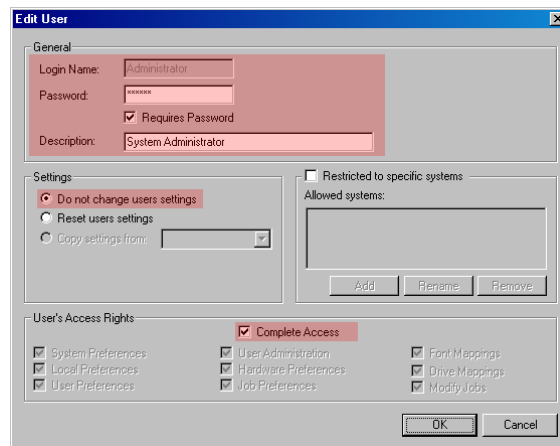
Continue to Add and configure Pwitcomb account (H) 148.

NOTE

Changes are NOT saved to the Administrator account until the Global Preferences dialog box 654 is closed.

6.5.4.3.8 Add and configure Pwitcomb account (H)

The second user out of the three that we need to add and then configure is the account for the Pwitcomb user. Follow the steps below:

1. With the Users dialog tab 665 displayed on the Global Preferences dialog box 654, select the New button 666. The Add/Edit User dialog box 560 dialog box is displayed.
2. In the Login Name text box 561, enter a login name for the Pwitcomb user. Because we have defined to use Microsoft® Windows® login sessions to login into CG Tools on startup 783, the user name for the Pwitcomb account must match the Microsoft® Windows® login name for the user. In this case, the Microsoft® Windows® login name is Pwitcomb, so we shall enter a login name to match:

Pwitcomb

3. Enter a password for the Pwitcomb user account. For this example we shall use the following password comprising of alphabetic and numeric characters (this is always good practice):

p0rsche

5. Optionally, to ensure that the new password is required when a user tries to log in to a CG Tools session using the Pwitcomb profile, ensure that the Requires Password box 562 is checked. If you check this box, then the user will not be able to login transparently using the Microsoft® Windows® login name and the Clarity Log In dialog box 595 will appear, ready for entry of an appropriate username and defined password.
6. If desired, you can edit the description for the user. For this example, we shall enter the users' full name:

Paul Witcomb

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   148

Copyright © 2000-2006 Pixel Power Ltd.

7. In the Settings group box ⌐563⌐, ensure that the Copy settings from ⌐563⌐ option is selected. Select Administrator from the adjacent drop-down list box. This ensures that CG tools configuration setup for the Administrator (configured in Configure CG Tools desktop and user preferences for Administrator user account (OPTIONAL) (F) ⌐147⌐), is used as a basis for the Pwitcomb user account and the CG Tools software defaults are NOT used.

8. You now have to decide on the users' access rights. For this example, we shall assume that the user should be able to:

Edit jobs.	Ensure that the Modify Jobs box ⌐564⌐ is checked.
Edit job preferences using the Job Preferences dialog box ⌐679⌐.	Ensure that the Job Preferences box ⌐564⌐ is checked).
Edit their own username and password settings.	Ensure that the User Preferences box ⌐564⌐ is checked).

All other boxes in the User's Access Rights group box ⌐564⌐ should be cleared.

9. Select OK to close the Add/Edit User dialog box ⌐560⌐ dialog box.

Continue to Add and configure Chopkin account (I) ⌐149⌐.

NOTE

Changes are NOT saved to the Pwitcomb account until the Global Preferences dialog box ⌐654⌐ is closed.

6.5.4.3.9   Add and configure Chopkin account (I)

The third and final user out of the three that we need to add and then configure is the account for the Chopkin user. Follow the steps below:

1. With the Users dialog tab ⌐665⌐ displayed on the Global Preferences dialog box ⌐654⌐, select the New button ⌐666⌐. The Add/Edit User dialog box ⌐560⌐ dialog box is displayed.
2. In the Login Name text box ⌐561⌐, enter a login name for the Chopkin user. Because we have defined to use Microsoft® Windows® login sessions to login into CG Tools on startup ⌐146⌐, the user name for the Chopkin account must match the Microsoft® Windows® login name for the user. In this case, the Microsoft® Windows® login name is Chopkin, so we shall enter a login name to match:

```
Chopkin
```

3. Enter a password for the Chopkin user account. For this example we shall use the following password comprising of alphabetic and numeric characters (this is always good practice):

```
merc3des
```

5. Optionally, to ensure that the new password is required when a user tries to log in to a CG Tools session using the Chopkin profile, ensure that the Requires Password box ⌐562⌐ is checked. If you check this box, then the user will not be able to login transparently using the Microsoft® Windows® login name and the Clarity Log-In dialog box ⌐595⌐ will appear, ready for entry of an appropriate username and defined password.
6. If desired, you can edit the description for the user. For this example, we shall enter the users' full name:

```
Chris Hopkin
```

7.   In the Settings group box [563], ensure that the Copy settings from [563] option is selected. Select Administrator from the adjacent drop-down list box. This ensures that CG tools configuration setup for the Administrator (configured in Configure CG Tools desktop and user preferences for Administrator user account (OPTIONAL) (F) [147]), is used as a basis for the Chopkin user account and the CG Tools software defaults are NOT used.

8.   You now have to decide on the users' access rights. For this example, we shall assume that the user should be able to:

Edit jobs.	Ensure that the Modify Jobs box [564] is checked.
Edit job preferences using the Job Preferences dialog box [679].	Ensure that the Job Preferences box [564] is checked).
Edit their own username and password settings.	Ensure that the User Preferences box [564] is checked).

All other boxes in the User's Access Rights group box [564] should be cleared.

9.   Select OK to close the Add/Edit User dialog box [560] dialog box.

10. Close the Global Preferences dialog box [654].
11. The Missing Drive Mappings dialog box [738] may be displayed informing you that there are missing drive mappings.
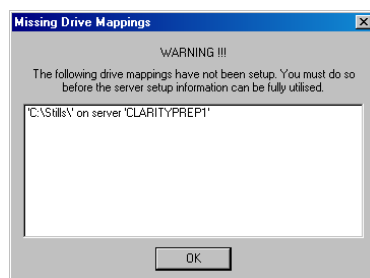
This is not a problem at this stage of the configuration and suitable steps will be taken during the configuration of Clarity Servers (see Clarity Server configuration (applies to all Clarity Servers in workgroup) (4) [155] to solve the problem.

12. Select OK to close the Missing Drive Mappings dialog box [738].

All XML files stored in the Remote user management location (RemoteUserLocation [142] on Pixel-p4-02) [140] are updated (except for the RemoteFTPMachines.cfg file) and relevant new files are written. Specifically:

- the Global.xml [170], Local.xml [171] and ClarityServers.xml [167] files that already existed get updated with local server and system information;
- the Administrator.xml [166] file that already existed gets updated with the CG Tools desktop and user

preference settings for the Administrator user account;
- the `Users.xml` [172] file get updated with details regarding the two new user accounts (Pwitcomb and Chopkin);
- two new user account files are created and named using the user account name (`Pwitcomb.xml` and `Chopkin.xml`). These files store user preference settings in the same way as the `Administrator.xml` file.

Continue to .

6.5.4.4 Configure Remote user management location on other servers in workgroup (ClarityPREP2/Clarity-300) (3)

This section features the following steps and should be completed on the other two Clarity Servers in the workgroup (ClarityPREP2 and Clarity300).

Step	Description
Login into Microsoft® Windows® with administrator rights (A) [151]	Enables access to necessary functionality.
Start CG Tools software derivative (B) [151]	Enables configuration.
Configure Remote user management location (C) [152]	In order for the Clarity-300 and ClarityPREP2 servers to start using the Remote user management location, we have to configure the CG Tools software with the location.
Re-start CG Tools software and login as the Administrator user (D) [153]	Update configuration settings.
Check inclusion of other workgroup Clarity servers (E) [154]	Check that other Clarity Servers that have be made known to the current user automatically by the interchange of information stored in the `ClarityServers.xml` [167] file

6.5.4.4.1 Login into Microsoft® Windows® with administrator rights (A)

Follow the steps below

1. Start the desired server in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges. If you log in using the Administrator, Pwitcomb or Chopkin user names that are also defined as user management account names for the workgroup, this will cause you to login to CG Tools transparently as one of these users.

3. Ensure that you are logging on to the same domain as the other Clarity Servers in your workgroup.

Continue to .

6.5.4.4.2 Start CG Tools software derivative (B)

Follow the steps below

1. Start the Clarity PREP or Clarity software by double-clicking on the Clarity PREP 7.1 or Clarity 7.1 icon on the desktop.

The first time that the CG Tools software runs, you are logged into the CG Tools software as the Administrator user. This login operation is totally transparent to the user [138]. This is because your Microsoft® Windows® login name does

151   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

not match the Pwitcomb and Chopkin accounts that have been defined for the CG Tools user management system as they are as yet not known to the software. The configuration files that already exist in the Local user management location [137] are to used to configure the current session.

Continue to Configure Remote user management location (C) [152].

SEE ALSO

System invisibility on single user systems [138]

6.5.4.4.3   Configure Remote user management location (C)

Although we have created a folder on a networked system that will act as the Remote user management location (`RemoteUserLocation` [142] on Pixel-p4-02) [140], the other two Clarity Servers in the workgroup (ClarityPREP2 and Clarity-300) do not yet know of that location and are currently using the default Local user management location [137] to read and write user management XML and text files [135] to and from. In order for the these Clarity Servers to start using the Remote user management location, we have to configure the CG Tools software with the location.

Follow the steps below:

1.   Select Options> [429] Preferences>Global Preferences [430]. The Global Preferences dialog box [654] is displayed.
2.   Select the Users dialog tab [665].
3.   In the Remote user location text box [666], enter the path to the Remote user location that you defined earlier. So, for this example, the path would be:

        \\Pixel-p4-02\RemoteUserLocation

        Alternatively, use the adjacent Browse button to browse the network for the desired system and shared folder on that system.

4.   Select OK to close the Global Preferences dialog box [654].
5.   The Missing Drive Mappings dialog box [738] may be displayed informing you that there are missing drive mappings on both the host and/or other Clarity Servers in the workgroup.

        This is not a problem at this stage of the configuration and suitable steps will be taken during the configuration of Clarity Servers (see Clarity Server configuration (applies to all Clarity Servers in workgroup) (4) [155] to solve the

problem.

6. Select OK to close the Missing Drive Mappings dialog box ⌐738⌐.

There should be a pause whilst the system tries to access the remote location. The following message should be displayed informing you that you need to restart the CG Tools software in order for the new settings to be read.
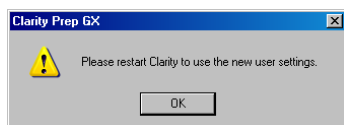
7. Select OK and exit the CG Tools software using the File> ⌐378⌐Exit ⌐384⌐ command.

The following configuration files that already exist in the Local user management location ⌐137⌐ on the current server are updated:

- the `Administrator.xml` ⌐166⌐ file that already exists gets updated (because you we logged in as the Administrator during the CG Tools session).
- the `Global.xml` ⌐170⌐, `Local.xml` ⌐171⌐ and `ClarityServers.xml` ⌐167⌐ files that already existed get updated with local server and system information.

The following configuration files that already exist in the Remote user management location (`RemoteUserLocation` ⌐142⌐ on Pixel-p4-02) ⌐140⌐ are updated:

- the `LogFile.xml` ⌐171⌐ file get updated with details regarding the actions you have just completed.

The following configuration files that already exist in the Local user management location ⌐137⌐ are updated with details from the identical file stored in the Remote user management location (`RemoteUserLocation` ⌐142⌐ on Pixel-p4-02) ⌐140⌐:

- the `Users.xml` ⌐172⌐ file gets copied containing details of the workgroup user account details, ready for any new CG Tools sessions that are started.

Continue to Re-start CG Tools software and login as the Administrator user (D) ⌐153⌐.

6.5.4.4.4 Re-start CG Tools software and login as the Administrator user (D)

Follow the steps below

1. Re-start the Clarity PREP or Clarity software by double-clicking on the Clarity PREP 7.1 or Clarity 7.1 icon on the desktop.

During the initialisation process, relevant XML files are read from the Remote user management location (RemoteUserLocation ⌐142⌐ on Pixel-p4-02) ⌐140⌐ into the CG Tools software.

If you have logged into Windows using the Administrator, Pwitcomb or Chopkin user names, then you are logged into the CG Tools software transparently using the related user management account name for the workgroup. You will be able to check this by checking the user name in the Status bar ⌐249⌐ at the bottom of the Main application window.

If you have logged into Windows using a name that DOES NOT match a related user management account name for the workgroup, the Clarity Log In dialog box ⌐595⌐ is displayed, enabling you to enter a user name and optional password that matches any of the three accounts defined for the workgroup.

2. In any case, in order to view the Global Preferences dialog box ⌐654⌐ in the current CG Tools session, you must login as the Administrator. If you are already logged in using the Pwitcomb or Chopkin user that has restricted access, log out using the File> ⌐378⌐Log Off <username> ⌐384⌐ command to display the Clarity Log Out dialog box

[596]. Select Log Out to display the Clarity Log In dialog box [595], then enter the Administrator username and `c00per` password and select Log In.

Continue to Check inclusion of other workgroup Clarity servers (E) [154].

SEE ALSO

System invisibility on single user systems [138]

6.5.4.4.5 Check inclusion of other workgroup Clarity servers (E)

Once you have re-started the CG Tools software and logged in using the Administrator account, you can check that other Clarity Servers that have be made known to the current user automatically by the interchange of information stored in the `ClarityServers.xml` [167] file.

1. Select Options> [429] Preferences>Global Preferences [430]. The Global Preferences dialog box [654] is displayed.
2. Ensure that the Clarity Servers dialog tab [655] is selected. Note the appearance of the additional workgroup Clarity Servers in the <server list box> [655].

   The picture shows the respective Clarity Servers dialog tab [655] on the Clarity-300 workgroup Clarity Server.

3. Select OK to close the Global Preferences dialog box [654].
4. The Missing Drive Mappings dialog box [738] may be displayed informing you that there are missing drive mappings on both the host and/or other Clarity Servers in the workgroup.

   This is not a problem at this stage of the configuration and suitable steps will be taken during the configuration of Clarity Servers (see Clarity Server configuration (applies to all Clarity Servers in workgroup) (4) [155] to solve the problem.

5. Select OK to close the Missing Drive Mappings dialog box [738].
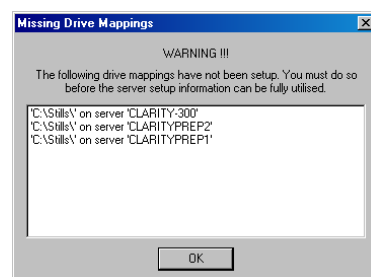
Continue to Exit CG Tools software (F) [155].

6.5.4.4.6   Exit CG Tools software (F)

Exit the CG Tools software using the <u>File></u> ⌐378⌐ <u>Exit</u> ⌐384⌐ command.

6.5.4.5   Clarity Server host configuration (to be completed individually on all Clarity Servers in the workgroup) (4)

The Clarity 300 system unit (Clarity-300) features a physical clip drive and the Clarity PREP systems (ClarityPREP1 and ClarityPREP2) feature an emulated clip store. All systems MUST have their DCOM settings configured to enable communication between the CG Tools applications running on each of the Clarity Servers.

The configuration process for the example workgroup is split into two sections. Firstly, you must configure of all servers within the workgroup using the following sections:

Step	Description
<u>Login into Microsoft® Windows® with administrator rights (A)</u> ⌐155⌐	Log in to Microsoft® Windows® as a user with administrative privileges.
<u>DCOM configuration (B)</u> ⌐156⌐	All information about the availability of clip stores, emulated clips stores and level of clip acceptance is queried on each Clarity Server using COM/DCOM. Therefore, pulling of clips from a clip store or pushing of clips to a clip store or emulated clip store is only possible when a COM/DCOM connection is possible.
<u>Create a working folder structure (C)</u> ⌐156⌐	Create a consistent, easily understandable folder structure that is identical on all Clarity Servers within the workgroup.
<u>Share the root content folder (D)</u> ⌐157⌐	Share the root folder of the new folder structure so that content can be copied to and from that folder and any sub-folders on each Clarity Server.
<u>Start CG Tools software and login as the Administrator user (E)</u> ⌐158⌐	Log into CG Tools with administrative privileges using the Administrator account.
<u>Configure default clip copy mode (F)</u> ⌐158⌐	Configure how clips that are being transferred by the job copy mechanism are accepted by each server in the workgroup.
<u>Specify emulated clip store folder (OPTIONAL) [PREP] (G)</u> ⌐159⌐	On systems without a physical clip store (the machine running Clarity PREP in this instance), configure the emulated clip store folder on the local drive where clips can be written and copied from.
<u>Specify still store folder (H)</u> ⌐159⌐	Specify the location of the folder that will contain stills.
<u>Re-start CG Tools software and login as the Administrator user (I)</u> ⌐160⌐	Re-start the CG Tools software and login as Administrator user so that all of the Clarity Servers in the workgroup reflect their latest configured settings and are visible and thus configurable on the <u>Clarity Servers dialog tab</u> ⌐655⌐ from a single server.

6.5.4.5.1   Login into Microsoft® Windows® with administrator rights (A)

Follow the steps below

1. Start the desired server in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges. If you log in using the Administrator, Pwitcomb or Chopkin user names that are also defined as user management account names for the workgroup, this will cause you to login to CG Tools transparently as one of these users.

155   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

3. Ensure that you are logging on to the same domain as the other Clarity Servers in your workgroup.

Continue to DCOM configuration (B) 156.

6.5.4.5.2 DCOM configuration (B)

All information about the availability of clip stores, emulated clips stores and level of clip acceptance is queried on each Clarity Server using COM/DCOM. Therefore, pulling of clips from a clip store or pushing of clips to a clip store or emulated clip store is only possible when a COM/DCOM connection is possible. The DCOM settings on all Clarity Servers within the workgroup must be configured correctly. Please refer to the following sections for more information:

Important information 1055
Enabling DCOM for the CG Tools software application on HOST systems 1068

Continue to DCOM configuration (B) 156.

6.5.4.5.3 Create a working folder structure (C)

Decide on a working folder/directory on the local system drive that will contain all of your job content (jobs, cels, cutouts, clips and logos etc). Job content can be further split below this folder as desired using sub-folders. We recommend also that your still store directory and emulated clip store be under this folder as well. This folder can then be shared and then specified as a single drive map location. There are several implications regarding the use of a single shared folder:

a) firstly, it makes it easy to organise jobs and job content, safe in the knowledge that the folder and all of its sub-folders will be accessible by other Clarity Servers;
b) secondly, it also means that you do not have to share the root of the local drive to ensure that all content can be accessed, thus improving security.

For this example, create the following folder structure on the local disk (in this case `C:\`) on each Clarity Server within the workgroup. Use the normal Microsoft Windows methods (i.e. use Windows Explorer) to create the folder hierarchy:

Disk	Root Folder	Content Folders	Description
`Local Disk (C:)`			Local disk on each server.
	`Clarity_Content`		Root content folder to be shared 157 and specified as a UNC drive map on each server.
		`Cels`	Folder to contain cel animations and possible sub-folders.
		`Clips`	Folder and possible sub-folders to contain clips and/or browse/header previews of clips copied to systems that do not feature a physical clip store. This folder is also defined as the emulated clip store folder 159 on Clarity PREP systems).
		`Cutouts`	Folder to contain cutout images and possible sub-folders.
		`Jobs`	Folder to contain jobs and possible sub-folders. When a job contained in this folder or any sub-folder is saved for the first time, a `Job Fonts` folder that stores copies of any fonts used in that job is created in the same folder and is subsequently used by any other jobs in that folder.
		`Logos`	Folder to contain logos and possible sub-folders.
		`Scripts`	Folder to contain VB scripts and possible sub-folders.
		`Stills`	Folder to contain stills (to be defined as the local still store folder 159 on each server).

Continue to Create a working folder structure (C) 156.

NOTE

This folder structure is only a guide and you may want to create a more complicated structure to suit your own individual preferences.

6.5.4.5.4   Share the root content folder (D)

To share the root content folder (`Clarity_Content`) so that it can be read and written from/to the other Clarity Servers in the workgroup, follow the steps below (Windows XP systems):

1. With the folder structure viewed within Windows Explorer, right-click on the `Clarity_Content` folder and select Sharing and Security. The Properties dialog box is displayed with the Sharing dialog tab selected.
2. Select the Share This Folder option.
3. Leave the Share Name as `Clarity_Content`.
4. Add a comment if desired using the Comment text box
5. Set the User limits as desired (we recommend using the default Maximum allowed setting).
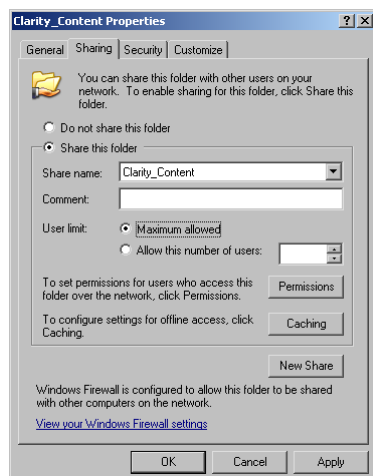
6. Select the Permissions button. The Permissions dialog box is displayed. By default, Microsoft Windows will configure the shared folder to have read-only access and you will have to manually define write permissions for the folder to enable content to be copied.
7. Ensure that the Everyone user type is selected in the Group or user names list box.
8. Ensure that the Full Control, Change and Read boxes are set to Allow. This setting will enable all users on Clarity Servers in the workgroup to read and write to and from the `Clarity_Content` folder.
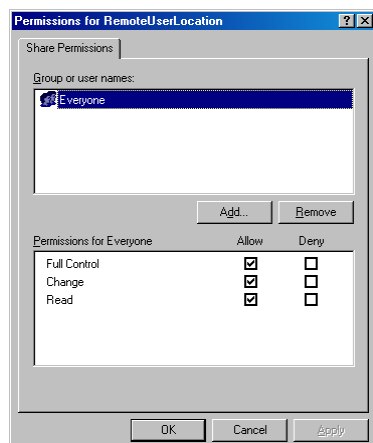
9. Select OK to close the Permissions dialog box and return to the Properties dialog box.
10. Select OK to close the Properties dialog box. Notice now that the `Clarity_Content` folder displays that it is a shared folder by a change of icon.

Continue to .

6.5.4.5.5   Start CG Tools software and login as the Administrator user (E)

Follow the steps below

1. Start the Clarity PREP or Clarity software by double-clicking on the Clarity PREP 7.1 or Clarity 7.1 icon on the desktop.

    During the initialisation process, relevant XML files are read from the Remote user management location (RemoteUserLocation [142] on Pixel-p4-02 [140]) into the CG Tools software.

    If you have logged into Windows using the Administrator, Pwitcomb or Chopkin user names, then you are logged into the CG Tools software transparently using the related user management account name for the workgroup. You will be able to check this by checking the user name in the Status bar [249] at the bottom of the Main application window.

    If you have logged into Windows using a name that DOES NOT match a related user management account name for the workgroup, the Clarity Log In dialog box [595] is displayed, enabling you to enter a user name and optional password that matches any of the three accounts defined for the workgroup.

2. In any case, in order to view the Global Preferences dialog box [654] in the current CG Tools session, you must login as the Administrator. If you are already logged in using the Pwitcomb or Chopkin user that has restricted access, log out using the File> [378] Log Off <username> [384] command to display the Clarity Log Out dialog box [596]. Select Log Out to display the Clarity Log In dialog box [595], then enter the Administrator username and `c00per` password and select Log In.

    Continue to Configure default clip copy mode (F) [158].

    SEE ALSO

    System invisibility on single user systems [138]

6.5.4.5.6   Configure default clip copy mode (F)

Configuration of the default clip copy mode is only available on servers supporting the Video clips [LICENSED] [CLARITY] [RETROFIT] [34] option (enables the Clip Store Emulation dialog tab) [710].

To configure how clips that are being transferred by the job copy mechanism are accepted by each server in the workgroup, follow the steps below:

1. With the CG Tools software running, select Options> [429] Preferences>Local Preferences [430]. The Local Preferences dialog box [696] is displayed.
2. Select the Clip Store Emulation dialog tab [710].
3. In the Default Clip Copy Mode group box, select the Accept any [712] option if you are configuring a server with a physical clip store (Clarity-300) or select the Accept only header and browse frame [712] option if you are configuring a server that does not feature a physical clip store (but features a configured emulated clip store i.e. ClarityPREP1 or ClarityPREP2).
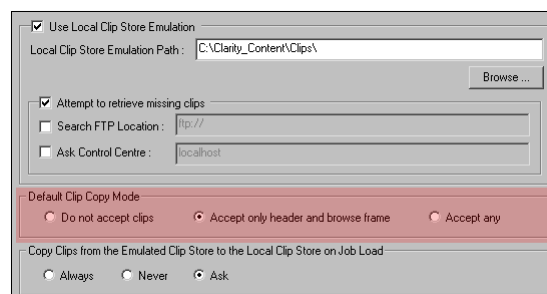
4.   Do not close the <u>Local Preferences dialog box</u> |696⌐

Continue optionally to <u>Specify emulated clip store folder (OPTIONAL) [PREP] (G)</u> |159⌐ or on to <u>Specify still store folder (H)</u> |159⌐.

6.5.4.5.7   Specify emulated clip store folder (OPTIONAL) [PREP] (G)

Configuration of the emulated clip store folder is only available on servers supporting the <u>Video clips [LICENSED] [CLARITY] [RETROFIT]</u> |34⌐ option (enables the <u>Clip Store Emulation dialog tab)</u> |710⌐.

On systems without a physical clip store, to configure the emulated clip store folder on the local drive where clips can be written and copied from, follow the steps below:

1.   With the <u>Local Preferences dialog box</u> |696⌐ displayed, select the <u>Clip Store Emulation dialog tab</u> |710⌐.
2.   Ensure that the <u>Use Local Clip Store Emulation box</u> |711⌐ is checked to turn on local clip store emulation for the current system.
3.   Enter the `C:\Clarity_Content\Clips` file path in the <u>Local Clip Store Emulation Path text box</u> |711⌐ or select the Browse button and select the file path using the Browse for Folder dialog box.
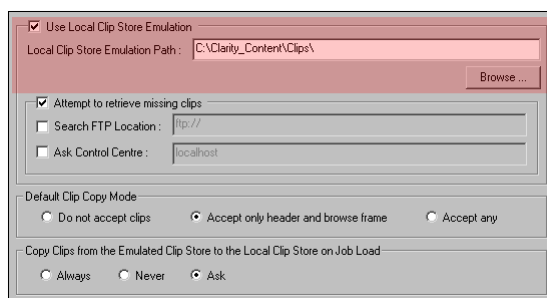
4.   Do not close the <u>Local Preferences dialog box</u> |696⌐.

Continue to <u>Specify still store folder (H)</u> |159⌐.

6.5.4.5.8   Specify still store folder (H)

Configuration of a <u>still store location</u> |32⌐ is only available on CG Tools CG and GX derivatives.

To configure the location of the folder that will contain stills, follow the steps below:

1.   With the <u>Local Preferences dialog box</u> |696⌐ displayed, select the <u>Still Store dialog tab</u> |730⌐.
2.   In the Still Store Directories group box, select Modify. The Browse for Folder dialog box is displayed.
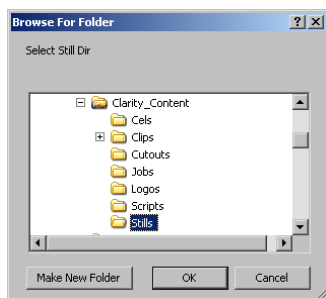
3.   Navigate to the `C:\Clarity_Content\Stills` file path, then select OK to close the Browse for Folder dialog box.
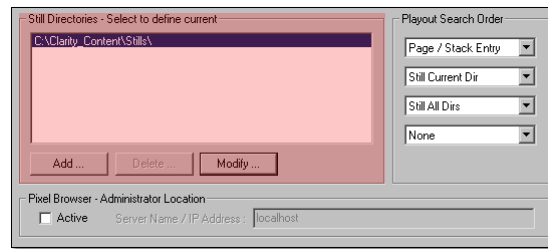
4. Select OK to close the Local Preferences dialog box 696 .

Continue to Re-start CG Tools software and login as the Administrator user (I) 160

6.5.4.5.9 Re-start CG Tools software and login as the Administrator user (I)

You now to need to re-start the CG Tools software and login as Administrator user so that all of the Clarity Servers in the workgroup:

a) reflect their latest configured settings;
b) are visible and thus configurable on the Clarity Servers dialog tab 655 from a single server.

Follow the steps below:

1. Exit the CG Tools software using the File> 378 Exit 384 command.
2. Re-start the Clarity PREP or Clarity software by double-clicking on the Clarity PREP 7.1 or Clarity 7.1 icon on the desktop.

   During the initialisation process, relevant XML files are read from the Remote user management location (RemoteUserLocation 142 on Pixel-p4-02) 140 into the CG Tools software.

   If you have logged into Windows using the Administrator, Pwitcomb or Chopkin user names, then you are logged into the CG Tools software transparently using the related user management account name for the workgroup. You will be able to check this by checking the user name in the Status bar 249 at the bottom of the Main application window.

   If you have logged into Windows using a name that DOES NOT match a related user management account name for the workgroup, the Clarity Log In dialog box 595 is displayed, enabling you to enter a user name and optional password that matches any of the three accounts defined for the workgroup.

2. In any case, in order to view the Global Preferences dialog box 654 in the current CG Tools session, you must login as the Administrator. If you are already logged in using the Pwitcomb or Chopkin user that has restricted access, log out using the File> 378 Log Off <username> 384 command to display the Clarity Log Out dialog box 596 . Select Log Out to display the Clarity Log In dialog box 595 , then enter the Administrator username and c00per password and select Log In.

Continue to Clarity Server drive mapping and job path/copy configuration (to be completed on a single Clarity Server in the workgroup) (5) 161 .

SEE ALSO

System invisibility on single user systems 138

6.5.4.6 Clarity Server drive mapping and job path/copy configuration (to be completed on a single Clarity Server in the workgroup) (5)

Once the configuration detailed in the previous sections [155] has been made on all Clarity Servers within the workgroup, you can then complete the rest of the configuration on a single Clarity Server:

Step	Description
Identify the machine on which you administer the drive mapping, job path and job copy configuration (A) [161]	Any one of the three Clarity Servers in the example workgroup can be used to administer the drive mapping, job path and job copy configuration.
Create drive mappings to locate root folder on all Clarity Servers in workgroup (B) [161]	Create a single drive map to the root folder, enabling each Clarity Server in the workgroup to locate the shared root folder on each server via network accessible UNC (Universal Naming Convention) paths.
Configure job path configuration to locate working job folder on all Clarity Servers in workgroup (C) [162]	Add a single job path, enabling each Clarity Server in the workgroup to locate the folder where jobs are stored on any other servers in the workgroup. Also configure the server to search sub-folders under the root job folder.
Configure job copy rules for Clarity Servers featuring a physical clip store (Clarity-300) (D) [162]	Configure job copy settings so that Clarity-300 (the Clarity 300 systems with physical clip store) knows how to copy associated files including clips to any other Clarity Servers in the workgroup.
Configure job copy rules for Clarity Servers that DO NOT feature a physical clip store (ClarityPREP1 and ClarityPREP2) (E) [163]	Configure job copy settings so that ClarityPREP1 and ClarityPREP2 know how to copy associated files including clips to any other server in the workgroup.
Close the Global Preferences dialog box and exit CG Tools software (F) [163]	Write settings to `ClarityServers.xml` [167] file and exit the CG Tools software.

6.5.4.6.1 Identify the machine on which you administer the drive mapping, job path and job copy configuration (A)

Any one of the three Clarity Servers in the example workgroup can be used to administer the drive mapping, job path and job copy configuration. For this example, we will use the ClarityPREP1 server [140].

The CG Tools software must be running on all Clarity Servers and the Administrator user must be logged into all Clarity Servers in the workgroup. This is to ensure that all of the Clarity Servers in the workgroup are visible and thus configurable on the Clarity Servers dialog tab [655] from a single server.

Continue to Create drive mappings to locate root folder on all Clarity Servers in workgroup (B) [161].

6.5.4.6.2 Create drive mappings to locate root folder on all Clarity Servers in workgroup (B)

To create a single drive map to the root folder, enabling each Clarity Server in the workgroup to locate the shared root folder on each server, with a view to locating emulated clip stores and still store locations, follow the steps below:

1. Select Options> [429] Preferences>Global Preferences [430]. The Global Preferences dialog box [654] is displayed.
2. Ensure that the Clarity Servers dialog tab [655] is selected. Note the appearance of the additional workgroup Clarity Servers in the <server list box> [655].
3. Select a server from the list of Clarity Servers (e.g. ClarityPREP1).
4. Select the Drive Maps dialog sub-tab [656].
5. Select Add [657] to display the Drive Map dialog box [622].
6. In the Local Path text box, enter `C:\Clarity_Content\`. Alternatively, select the adjacent browse button and navigate to the `Clarity_Content` folder on the local drive via My Computer.
7. In the Network Path text box, enter `\\SERVERNAME\Clarity_Content\` (where `SERVERNAME` is the machine name of the Clarity Server that you are configuring e.g. `ClarityPREP1`). Alternatively, select the adjacent browse button and navigate to the `Clarity_Content` folder on the local drive of the current Clarity Server via My Network Places.

161   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
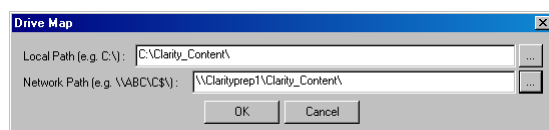
8. Select OK to close the Drive Map dialog box [622] and return to the Clarity Servers dialog tab [655].

The drive mapping is added the list on the Drive Maps dialog sub-tab [656] for ClarityPREP1.

Repeat the steps above to add the same drive mapping to the remaining Clarity Servers in the list (ClarityPREP2 and Clarity-300).

Continue to Configure job path configuration to locate working job folder on all Clarity Servers in workgroup (C) [162].

NOTE

Do not close the Global Preferences dialog box [654] as it is required for the next step.

6.5.4.6.3 Configure job path configuration to locate working job folder on all Clarity Servers in workgroup (C)

To add a single job path and configure each server to search sub-folders under the root job folder, enabling each Clarity Server in the workgroup to locate the folder where jobs are stored on any other server in the workgroup, follow the steps below:

1. With the Global Preferences dialog box [654] displayed and the Clarity Servers dialog tab [655] selected, select a server from the list of Clarity Servers (e.g. ClarityPREP1).
2. Select the Server Properties dialog sub-tab [659].
3. Select Add [657] in the Job Path Configuration group box [661] to display the Clarity Server Job Path dialog box [597] .
4. In the Server Job Path text box, enter `C:\Clarity_Content\Jobs`. Alternatively, select the adjacent browse button and navigate to the `Jobs` folder on the local drive via My Computer.
5. Additionally, each job path must be given an alias, allowing for more meaningful names. Enter a name in the adjacent text box (for this example, use `Jobs`).
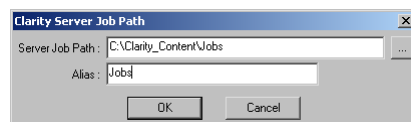
6. Select OK to close the Clarity Server Job Path dialog box [597] and return to the Clarity Servers dialog tab [655].
7. To ensure that sub-directories within `C:\Clarity_Content\Jobs` are queried for job content, check the Sub-Dirs. box.

The job path and applicable alias name are added to the list on the Job Path Configuration group box [661] for ClarityPREP1.

Repeat the steps above to add the same job path to the remaining Clarity Servers in the list (ClarityPREP2 and Clarity-300).

Continue to Configure job copy rules for Clarity Servers featuring a physical clip store (Clarity-300) (D) [162].

NOTE

Do not close the Global Preferences dialog box [654] as it is required for the next step.

6.5.4.6.4 Configure job copy rules for Clarity Servers featuring a physical clip store (Clarity-300) (D)

To configure job copy settings so that Clarity-300 (the Clarity 300 system with physical clip store) knows how to copy associated files including clips to any other Clarity Servers in the workgroup, follow the steps below:

1. With the Global Preferences dialog box [654] displayed and the Clarity Servers dialog tab [655] selected, select Clarity-300 from the list of Clarity Servers.
2. Select the Job Copy Settings dialog sub-tab [657].
3. Ensure that the Copy Associated Files box is checked to copy any files associated with the source job to the selected Clarity Server.
4. Ensure that the Overwrite If Modified option is selected in the Overwrite Mode group box.
5. Ensure that the Copy Associated Clips box is checked to copy any clips associated with the source job to the selected Clarity Server.
6. Ensure that the Clip Store option is selected in the Default Clip Destination Mode, meaning that clips will be copied to the connected physical clip store. The connected clip store should be shown in the adjacent list box by

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006 162

Copyright © 2000-2006 Pixel Power Ltd.

default (e.g. `Clips1`)

7.   Ensure that the Copy Full Clip option is selected in the Default Clip Copy Mode group box (this should be selected by default), meaning that only entire clips are copied to the connected physical clip store on Clarity-300.
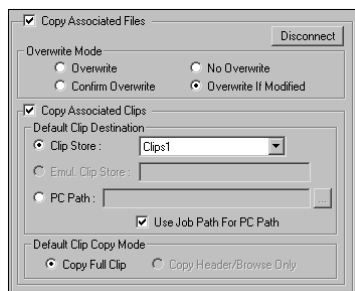
Continue to Configure job copy rules for Clarity Servers that DO NOT feature a physical clip store (ClarityPREP1 and ClarityPREP2) (E) 163.

NOTE

Do not close the Global Preferences dialog box 654 as it is required for the next step.

6.5.4.6.5   Configure job copy rules for Clarity Servers that DO NOT feature a physical clip store (ClarityPREP1/ClarityPREP2) (E)

To configure job copy settings so that ClarityPREP1 and ClarityPREP2 know how to copy associated files including clips to any other server in the workgroup, follow the steps below:

1.   With the Global Preferences dialog box 654 displayed and the Clarity Servers dialog tab 655 selected, select ClarityPREP1 from the list of Clarity Servers.
2.   Select the Job Copy Settings dialog sub-tab 657.
3.   Ensure that the Copy Associated Files box is checked to copy any files associated with the source job to the selected Clarity Server.
4.   Ensure that the Overwrite If Modified option is selected in the Overwrite Mode group box.
5.   Ensure that the Copy Associated Clips box is checked to copy any clips associated with the source job to the selected Clarity Server.
6.   Ensure that the Emul. Clip Store option is selected, meaning that clips will be copied to the emulated clip store.
7.   Ensure that the Copy Header/Browse Only option is selected in the Default Clip Copy Mode group box (this should be selected by default), meaning that only clip header and browse frames are copied to the emulated clip store.
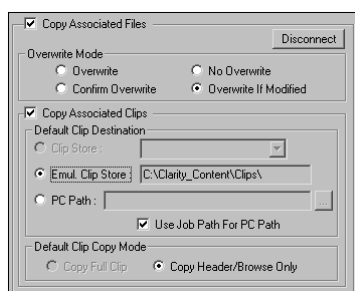
Repeat the steps above to configure the same job copy rules for ClarityPREP2.

Continue to Close the Global Preferences dialog box and exit CG Tools software (F) 163.

6.5.4.6.6   Close the Global Preferences dialog box and exit CG Tools software (F)

Follow the steps below:

1.   Select OK to close the Global Preferences dialog box 654.

There should be a pause whilst the system tries to access the remote location. The following error message may

163   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

be displayed:

This message is displayed in circumstances where the Remote user management location cannot be accessed. This may be due to:

- transient networking problems;
- the system hosting the Remote user management location is not on the same domain as the current Clarity Server;
- the shared folder used as the Remote user management location has not been shared correctly or the read/write permissions have not been configured correctly.

Once the Remote user management location has been accessed, the ClarityServers.xml [167] file is updated in the Remote user management location (RemoteUserLocation [142] on Pixel-p4-02) [140] with revised configuration information for all three Clarity Servers in the workgroup (see Example ClarityServers.xml file server definitions for current workgroup) [164].

2.   Exit the CG Tools software using the File> [378] Exit [384] command.

6.5.4.7   Example ClarityServers.xml file server definitions for current workgroup

The following example ClarityServers.xml file definitions for this example are available:

Clarty Server	Description
Clarity-300 [164]	Server configuration attributes for Clarity-300 [140].
ClarityPREP1 [165]	Server configuration attributes for ClarityPREP1 [140].
ClarityPREP1 [165]	Server configuration attributes for ClarityPREP2 [140].

SEE ALSO

ClarityServers.xml [167]
ClarityServers.xml tag reference [168]

6.5.4.7.1   Clarity-300

The XML code below defines the server configuration attributes for Clarity-300 (the Clarity 300 system with physical clip store). Refer to ClarityServers.xml tag reference [168] for more information on the tags featured.

```
<Clarity_Server>
    <Hostname>CLARITY-300</Hostname>
    <Alias>CLARITY-300</Alias>
    <Server_Connect_Mode>1</Server_Connect_Mode>
    <Include_Clarity_Explorer>Yes</Include_Clarity_Explorer>
    <Job_Paths>
        <Include_Sub_Dirs>Yes</Include_Sub_Dirs>
        <Job_Path>
            <Path>C:\Clarity_Content\Jobs\</Path>
            <Alias>Jobs</Alias>
        </Job_Path>
    </Job_Paths>
    <Job_Copy_Settings>
        <Copy_Assoc_Files>Yes</Copy_Assoc_Files>
        <Copy_Assoc_Clips>Yes</Copy_Assoc_Clips>
        <Clip_Destination>Clip Store</Clip_Destination>
        <Dest_Clip_Store>ClipsClarity300</Dest_Clip_Store>
        <Clip_Copy_Mode>Entire Clip</Clip_Copy_Mode>
        <Overwrite_Mode>Overwrite If Modified</Overwrite_Mode>
    </Job_Copy_Settings>
    <Drive_Map_Settings>
        <Drive_Map>
            <Local_Path>c:\clarity_content\</Local_Path>
```

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   164

Copyright © 2000-2006 Pixel Power Ltd.

```
            <Network_Path>\\clarity-300\clarity_content\</Network_Path>
        </Drive_Map>
    </Drive_Map_Settings>
</Clarity_Server>
```

6.5.4.7.2   ClarityPREP1

The XML code below defines the server configuration attributes for ClarityPREP1 (the PC running Clarity PREP with an emulated clip store). Refer to ClarityServers.xml tag reference [168] for more information on the tags featured.

```
<Clarity_Server>
    <Hostname>CLARITYPREP1</Hostname>
    <Alias>CLARITYPREP1</Alias>
    <Server_Connect_Mode>1</Server_Connect_Mode>
    <Include_Clarity_Explorer>Yes</Include_Clarity_Explorer>
    <Job_Paths>
        <Include_Sub_Dirs>Yes</Include_Sub_Dirs>
        <Job_Path>
            <Path>C:\Clarity_Content\Jobs\</Path>
            <Alias>Jobs</Alias>
        </Job_Path>
    </Job_Paths>
    <Job_Copy_Settings>
        <Copy_Assoc_Files>Yes</Copy_Assoc_Files>
        <Copy_Assoc_Clips>Yes</Copy_Assoc_Clips>
        <Clip_Destination>Emulated Clip Store</Clip_Destination>
        <Clip_Copy_Mode>Clip Header/Browse Only</Clip_Copy_Mode>
        <Overwrite_Mode>Overwrite If Modified</Overwrite_Mode>
    </Job_Copy_Settings>
    <Drive_Map_Settings>
        <Drive_Map>
            <Local_Path>c:\clarity_content\</Local_Path>
            <Network_Path>\\clarityprep1\clarity_content\</Network_Path>
        </Drive_Map>
    </Drive_Map_Settings>
</Clarity_Server>
```

6.5.4.7.3   ClarityPREP2

The XML code below defines the server configuration attributes for ClarityPREP2 (the PC running Clarity PREP with an emulated clip store). Refer to ClarityServers.xml tag reference [168] for more information on the tags featured.

```
<Clarity_Server>
    <Hostname>CLARITYPREP2</Hostname>
    <Alias>CLARITYPREP2</Alias>
    <Server_Connect_Mode>1</Server_Connect_Mode>
    <Include_Clarity_Explorer>Yes</Include_Clarity_Explorer>
    <Job_Paths>
        <Include_Sub_Dirs>Yes</Include_Sub_Dirs>
        <Job_Path>
            <Path>C:\Clarity_Content\Jobs\</Path>
            <Alias>Jobs</Alias>
        </Job_Path>
    </Job_Paths>
    <Job_Copy_Settings>
        <Copy_Assoc_Files>Yes</Copy_Assoc_Files>
        <Copy_Assoc_Clips>Yes</Copy_Assoc_Clips>
        <Clip_Destination>Emulated Clip Store</Clip_Destination>
        <Clip_Copy_Mode>Clip Header/Browse Only</Clip_Copy_Mode>
        <Overwrite_Mode>Overwrite If Modified</Overwrite_Mode>
    </Job_Copy_Settings>
    <Drive_Map_Settings>
        <Drive_Map>
            <Local_Path>c:\clarity_content\</Local_Path>
            <Network_Path>\\clarityprep2\clarity_content\</Network_Path>
        </Drive_Map>
    </Drive_Map_Settings>
</Clarity_Server>
```

6.5.5 Featured XML files, basic description and tag reference (where relevant)

This section describes the user management XML configuration files and provides an XML tag reference where relevant:

XML file	Tag reference	Description
<username>.xml [166]	N/A	Stores user configuration settings for the Administrator user.
Administrator.xml [166]	N/A	Stores user configuration settings for named users.
ClarityServers.xml [167]	ClarityServers.xml tag reference [168]	Stores configuration information for Clarity Servers defined within your workgroup.
Global.xml [170]	N/A	Stores global settings for all systems within a networked workgroup.
Local.xml [171]	N/A	Stores local settings specifically for the server.
LogFile.xml [171]	LogFile.xml tag reference [171]	Keeps track of changes made to the user management system.
Users.xml [172]	Users.xml tag reference [172]	Stores user account information.

6.5.5.1 Administrator.xml and <username>.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Due to the amount of settings that can be stored in these configuration files, an XML tag reference for these files has been deemed as in-appropriate given that the file is very unlikely to be edited directly (unless advised by Pixel Power technical support).

Stores user configuration settings for named users (<username>.xml file(s)) and the Administrator (Administrator.xml).

```
<Clarity>
 <Settings Font_Mapping_List_Sort_Column="1" Font_Mapping_List_Sort_Ascending="1"
     Language_Selection="0" Toolbars_Version="7" Shown_Bars="1" Timecode_Status_Pos="
     0,46,0" GPI_Status_Pos="3,67,0" VBI_Status_Pos="6,88,0" WindowPos="
     2,3,-1,-1,-1,-1,-4,-4,1557,1170" JobPagesWindowPos="
     0,1,0,1039,-1,-1,973,29,1501,761,1,1,1" JobPageHeaderLengths="1 80 46 64 154 148
     130 164 184 15" Software_Output_Window_Visible="0" Preview_Window_Pos_1="
     0,5,-1,-1,-1,-1,850,899,1042,1081" Preview_Zoom_Factor_1="0.250000"
     Playout_Control_Pos="3,100,1" Voice-over_Control_Pos="0,38,0" AssocFieldMgr="
     1,300,0,70,2,200,3,200,1,0" Global_Fields_Manager_Shown="0" AssocFieldMgrWindowPos
     ="0,46,520,521,0" Data_Store_Viewer_Shown="0" Data_Store_Viewer_Window_Pos="
     0,46,491,322,0" ZoomFactor="1000" Selection_Rectangle="0,0,720,576" File_Version="
     7.1">
  <Painting Brush_Colour="-10858000" />
  <QuickLoads QuickLoad0-InUse="0" QuickLoad0-FileName="" QuickLoad0-Title=""
     QuickLoad1-InUse="0" QuickLoad1-FileName="" QuickLoad1-Title="" QuickLoad2-InUse="0
     " QuickLoad2-FileName="" QuickLoad2-Title="" QuickLoad3-InUse="0"
     QuickLoad3-FileName="" QuickLoad3-Title="" QuickLoad4-InUse="0" QuickLoad4-FileName
     ="" QuickLoad4-Title="" QuickLoad5-InUse="0" QuickLoad5-FileName=""
     QuickLoad5-Title="" QuickLoad6-InUse="0" QuickLoad6-FileName="" QuickLoad6-Title=""
     QuickLoad7-InUse="0" QuickLoad7-FileName="" QuickLoad7-Title="" QuickLoad8-InUse="0
     " QuickLoad8-FileName="" QuickLoad8-Title="" QuickLoad9-InUse="0"
     QuickLoad9-FileName="" QuickLoad9-Title="" QuickLoad-Startup="-1" />
 </Settings>
 <General-Summary Bars="6" ScreenCX="1920" ScreenCY="1200" />
 <Default_Logos Logo_0="" Logo_1="" Logo_2="" Logo_3="" Logo_4="" />
 <General-Bar0 BarID="59392" XPos="-2" YPos="-2" Docking="1" MRUDockID="0"
     MRUDockLeftPos="-2" MRUDockTopPos="-2" MRUDockRightPos="336" MRUDockBottomPos="28"
     MRUFloatStyle="8196" MRUFloatXPos="-2147483648" MRUFloatYPos="0" />
 <General-Bar1 BarID="59401" XPos="334" YPos="-2" Docking="1" MRUDockID="0"
     MRUDockLeftPos="334" MRUDockTopPos="-2" MRUDockRightPos="914" MRUDockBottomPos="28"
     MRUFloatStyle="8196" MRUFloatXPos="-2147483648" MRUFloatYPos="1168" />
 <General-Bar2 BarID="59393" />
```

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   166

Copyright © 2000-2006 Pixel Power Ltd.

```
<General-Bar3 BarID="59419" Bars="4" Bar0x230="0" Bar0x231="59392" Bar0x232="59401"
    Bar0x233="0" />
<General-Bar4 BarID="59420" Bars="3" Bar0x230="0" Bar0x231="59412" Bar0x232="0" />
<General-Bar5 BarID="59412" Visible="0" XPos="-2" YPos="-2" Docking="1" MRUDockID="0"
    MRUDockLeftPos="0" MRUDockTopPos="0" MRUDockRightPos="6357114" MRUDockBottomPos="
    6357102" MRUFloatStyle="8196" MRUFloatXPos="-2147483648" MRUFloatYPos="1168" />
</Clarity>="8196" MRUFloatXPos="-1" MRUFloatYPos="992" />
</Clarity>
```

Some of these settings are those defined using the General [816], Edit [816], User Quickloads [821], Voice-Over [820] and Page Formats [819] dialog tabs on the User Preferences dialog box [809] (except for the Password dialog tab where password information is stored in the Users.xml [172] file).

Other settings that are stored from various other dialog boxes include but are not limited to:

- job copy and package settings from the Copy Clarity Job dialog box [605];
- animation marker settings from the Animation Marker dialog box [565].

Many further setting are stored based on passive configurable settings that were previously stored in the system registry but are not limited to:

- dialog box, window and control box size/positions;
- toolbar docking and positions;
- various file locations (jobs, logos, cutouts etc.);
- view and zoom settings;
- recent file lists.

6.5.5.2   ClarityServers.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Stores configuration information for Clarity Servers defined within your workgroup.

```
<Clarity_Server>
    <Hostname>CLARITY-300</Hostname>
    <Alias>CLARITY-300</Alias>
    <Server_Connect_Mode>1</Server_Connect_Mode>
    <Include_Clarity_Explorer>Yes</Include_Clarity_Explorer>
    <Job_Paths>
        <Include_Sub_Dirs>Yes</Include_Sub_Dirs>
        <Job_Path>
            <Path>C:\Clarity_Content\Jobs\</Path>
            <Alias>Jobs</Alias>
        </Job_Path>
    </Job_Paths>
    <Job_Copy_Settings>
        <Copy_Assoc_Files>Yes</Copy_Assoc_Files>
        <Copy_Assoc_Clips>Yes</Copy_Assoc_Clips>
        <Clip_Destination>Clip Store</Clip_Destination>
        <Dest_Clip_Store>ClipsClarity300</Dest_Clip_Store>
        <Clip_Copy_Mode>Entire Clip</Clip_Copy_Mode>
        <Overwrite_Mode>Overwrite If Modified</Overwrite_Mode>
    </Job_Copy_Settings>
    <Drive_Map_Settings>
        <Drive_Map>
            <Local_Path>c:\clarity_content\</Local_Path>
            <Network_Path>\\clarity-300\clarity_content\</Network_Path>
        </Drive_Map>
    </Drive_Map_Settings>
</Clarity_Server>
```

SEE ALSO

Global Preferences dialog box [654]
Clarity Servers dialog tab [655]
ClarityServers.xml tag reference [168]

6.5.5.2.1   ClarityServers.xml tag reference

See a subsequent section for more details.

Section	Description
General tags [168]	Includes server hostname, alias, how the server is connected and whether the server is viewable using the Clarity Explorer.
Job Path tags [168]	Defines job path settings for the selected server. Configured using the Job Path Configuration group box [661] on the Server Properties dialog sub-tab [659].
Job Copy Settings tags [168]	Defines job copy settings for the selected server. Configured using the Job Path Configuration group box [661] on the Server Properties dialog sub-tab [659].
Drive Map Settings tags [170]	Defines drive map settings for the selected server. Configured using the Drive Maps dialog sub-tab [656].

The following table lists general XML tags, their related parameters and matching GUI configuration location.

Tag	Parameters	Description
`Hostname`	`<name>`	Defines the hostname of the server.
`Alias`	`<name>`	Defines the alias name of the server.
`Server_Connect_Mode`		Defines how the server is connected.
	`1`	Connect On Use [663]
	`2`	Connect Manually [663]
	`3`	Connect At Startup [663]
`Include_Clarity_Explorer`		Defines whether the server is viewable using the Clarity Explorer. Configured using Include this server in the clarity explorer window check box [661]
	`Yes`	Included.
	`No`	Not included.

The following table lists job path XML tags, their related parameters and matching GUI configuration location.

Tag			Parameters	Description
`Job_Paths`				Defines job path settings for the selected server. Configured using the Job Path Configuration group box [661] on the Server Properties dialog sub-tab [659] on the Clarity Servers dialog tab [655].
	`Include_Sub_Dirs`			Defines whether sub-directories within the selected job path in the Job Path Configuration list box are queried for job content. Configured using the Sub Dirs. check box.
			`Yes`	Sub-directories are not queried.
			`No`	Sub-directories are queried.
	`Job_Path`			Defines an instance of a job path.
		`Path`	`<path>`	Job path. Configured using the Server Job Path text box [597] on the Clarity Server Job Path dialog box [597].
		`Alias`	`<name>`	Alias of job path. Configured using the Alias text box [597] on the Clarity Server Job Path dialog box [597].

The following table lists job copy XML tags, their related parameters and matching GUI configuration location.

Tag	Parameters	Description
`Job_Copy_Settings`		Defines job copy settings for the selected server. Configured using the Job Copy Settings dialog sub-tab [657] on the Clarity Servers dialog tab [655].

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   168

Copyright © 2000-2006 Pixel Power Ltd.

Tag		Parameters	Description
	Copy_Assoc_Files		Defines whether any files associated with the source job are copied to the selected server. Configured using the Copy Associated Files check box [658] on the Job Copy Settings dialog sub-tab [656].
		Yes	Copy associated files.
		No	Do not copy any associated files.
	Copy_Assoc_Clips		Defines whether any clips associated with the source job are copied to the selected server. Configured using the Copy Associated Clips check box [658] on the Job Copy Settings dialog sub-tab [656].
		Yes	Copy associated clips.
		No	Do not copy any associated clips.
	Clip_Destination		Defines how clips are copied to the selected server. Configured using the Clip Store option and adjacent drop-down list box in the Default Clip Destination group box [658] on the Job Copy Settings dialog sub-tab [656].
		Emulated Clip Store	Copy clips to the emulated clip store.
		Custom PC Drive	Copy clips to a custom PC drive. By default, clips will be copied to a folder called Clips inside the destination job path if the Use Job Path For PC Path box is checked.
		Clip Store	Copy clips to a physical Clarity clip store.
	Dest_Clip_Store	<name>	Defines the name of the selected physical clip store volume on the selected server. Configured using the Clip Store option and adjacent drop-down list box in the Default Clip Destination group box [658] on the Job Copy Settings dialog sub-tab [656].
	Dest_PC_Path_Use_Job_Path	Yes	If the Clip_Destination tag is set to Custom PC Drive, defines that clips are copied to a folder called Clips inside the destination job path. Configured when the Use Job Path For PC Path box is cleared in the Default Clip Destination group box [658] on the Job Copy Settings dialog sub-tab [656].
	Dest_PC_Path		If the Clip_Destination tag is set to Custom PC Drive, defines the optional user defined path that clips are written on the destination server instead of the default Clips folder inside the destination job path.
		<path>	Destination clip path on server. Configured using the Clip Store option and adjacent drop-down list box when the Use Job Path For PC Path box is cleared in the Default Clip Destination group box [658] on the Job Copy Settings dialog sub-tab [656].

Tag			Parameters	Description
	Clip_Copy_Mode			Defines how clips are copied based on the existence of a physical or emulated clip store. Configured using the controls in the Default Clip Copy Mode group box 658 on the Job Copy Settings dialog sub-tab 656.
			Entire Clip	Copy the entire clip.
			Clip Header/ Browse Only	Copy just the clip header and browse frame.
	Overwrite_Mode			Defines what happens during the copying process when associated files of the same name are encountered on the selected Clarity Server. Configured using the controls in the Overwrite group box 658 on the Job Copy Settings dialog sub-tab 656.
			Overwrite	Overwrite any existing files without prompting.
			No Overwrite	Leave associated files with the same name intact.
			Confirm Overwrite	Prompt whether to overwrite the selected file or continue, leaving the existing file intact.
			Overwrite If Modified	Overwrite associated files only if the existing file is older than the new file.

The following table lists drive mapping XML tags, their related parameters and matching GUI configuration location.

Tag			Parameters	Description
Drive_Map_Settings				Defines drive map settings for the selected server. Configured using the Drive Maps dialog sub-tab 656
	Drive_Map			Defines an instance of a drive map.
		Local_Path	<path>	Local path where the desired job content is located on the local Clarity Server. Configured using the Drive Map dialog box 622 after selecting Add 657 or Edit 657.
		Network_Path	<path>	UNC network path that can be used by remote Clarity Servers to access the local drive path. Configured using the Drive Map dialog box 622 after selecting Add 657 or Edit 657.

6.5.5.3   Global.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Stores global settings for all systems within a networked workgroup. Configured using the Global Preferences dialog box 654.

```
<Clarity>
  <Settings Local_Image_Path="" Page_Creation_Format="1" Allow_aspect_mismatch="0"
    Allow_frame_rate_mismatch="0" Dissallow_v-s_change_to_used_pages="1"
    Graphics_Filter="0" File_Version="7.1" />
</Clarity>
```

NOTE

At present only settings from the Video dialog tab 667 are stored in this file.

SEE ALSO

6.5.5.4 Local.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Stores local settings specifically for the current server.

```
<Clarity>
 <Settings Font_Mapping_Completed="1" Dual_Clip_Channel_Mode="0" Check_Associated_Files
       ="1" Min._Field_ID="1" DebugFlushModeV2="2" Enable_DirectDraw="0"
       Preview_output_usage="0" Display_preview_details="0" Graphics_Tablet_Enabled="0"
       Live_Loop_Through_Offline="1" Rapid_Action_Keyboard_Type="1" Use_Local_Job_Path="
       0" Local_Job_Path="" Use_Local_Images="0" Check_For_Numbered_Still_Files="1"
       Check_For_Images_On_Local_Drive="1" Log_Playback_Events_Against_Timecode="1"
       VBI_Trigger_Field_1="0" VBI_Trigger_Field_2="1" VBI_Trigger_Allow_Field_Mismatch
       ="1" VBI_Delay_Compensation="0" Extended_Keyboard_File="C:\Program Files\Pixel
       Power Ltd\CG Tools 7.1\SubFiles\ExtendedKeyboardMap.ekm"
       Close_All_Windows_On_Logout="1" UserInstrWnd="0,1,-1,-1,-1,0,46,285,153"
       CelAnimationDlg="0,1,-1,-1,-1,-1,0,46,568,343" Ramcorder_-_Window_Position="
       0,1,-1,-1,-1,-1,0,46,963,338" Timecode_Status_Pos="136,224,0" GPI_Status_Pos="
       139,245,0" VBI_Status_Pos="142,266,0" WindowPos="2,3,-1,-1,-1,-1,132,174,1092,896
       " Playout_Control_Pos="90,692,1" Software_Generated_Output_Pos="275,783,1"
       File_Version="7.1">
    <Remote_Control_Options Handle_eXternal_Update_Requests="0"
       External_Update_Response_-_Wait_Time="10" Use_Code_Page="0" />
 </Settings>
 <System CurDir="C:\Program Files\Pixel Power Ltd\CG Tools 7.1" />
 <Collage_To_PC_Font_Path_Maps TT0035M_.TTF="Bodoni Book BT, 0" TT0036M_.TTF="Bodoni
       Book Italic BT, 0" TT0037M_.TTF="Bodoni Bold BT, 0" TT0038M_.TTF="Bodoni Bold
       Italic BT, 0"/>
</Clarity>
```

6.5.5.5 LogFile.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Keeps track of changes made to the user management system.

```
<LogFileEntries>
    <Log Date="16:44:59 - 29/11/2005" Entry="Writing updated system preferences file" User
       ="pixeluser1" Win_Logon="PPUser1" Machine_Name="PIXEL-01" />
    <Log Date="13:39:34 - 30/11/2005" Entry="Writing updated system preferences file" User
       ="pixeluser2" Win_Logon="PPUser2" Machine_Name="PIXEL-02" />
    <Log Date="12:20:27 - 2/12/2005" Entry="Writing updated system preferences file" User
       ="pixeluser3" Win_Logon="PPUser3" Machine_Name="PIXEL-03" />
</LogFileEntries>
```

NOTE

The only change monitored at this present time of writing is the writing of updated preferences.

SEE ALSO

6.5.5.5.1 LogFile.xml tag reference

The `LogFile.xml` file should ALWAYS have a `<LogFileEntries>` base tag.

Tag	Parameters	Description
LogFileEntries		Contains log file entries.

Tag		Parameters	Description
	Log Date	HH:MM:SS - DD/MM/YYYY	Time and date of the log entry.
	Entry	\<log message>	Descriptive log message.
	User	\<name>	User name.
	Win_Logon	\<name>	Windows log in name.
	Machine_Name	\<DNS name>	Machine name on which the entry is actioned.

6.5.5.6 Users.xml

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Stores user account information including display name, internal name, password (encrypted) etc. for each defined user including the Administrator and the Automation users. The example below shows three users.

```
<UserList UsingWindowsSessions="No" AutomationUser="3">
<User DName="Administrator" Name="ADMINISTRATOR" Password="
        bdffbeffbcffb4ffbbffb0ffb0ffadffffff" Description="System Administrator"
        PasswordRequired="No" WindowsSession="No" Restricted="No">
  <AllowedFeature Name="All"/>
  </User>
<User DName="pwitcomb" Name="PWITCOMB" Password="bdffbeffbcffb4ffbbffb0ffb0ffadffffff"
        Description="" PasswordRequired="No" WindowsSession="No" Restricted="No">
  </User>
<User DName="Automation" Name="AUTOMATION" Password="
        bdffbeffbcffb4ffbbffb0ffb0ffadffffff" Description="The Automation user"
        PasswordRequired="No" WindowsSession="No" Restricted="No">
  <AllowedFeature Name="All"/>
  </User>
</UserList>
```

SEE ALSO

Users.xml tag reference 172

6.5.5.6.1 Users.xml tag reference

The `Users.xml` file should ALWAYS have a `<UserList>` base tag.

Tag		Parameters	Description
UserList			Contains attributes that influence the entire user system.
	AutomationUser		Defines which user in the list will be the Automation user. Set to a number between 0 and the number of users (minus 1). For example, if the value is set to 0 in the example 172, then the Administrator is the Automation user. Configured using the Set as Automation User 666 button on the Users dialog tab 665 on the Global Preferences dialog box 654.
		\<n>	User in the list designated as the Automation user.

Tag		Parameters	Description
	UsingWindowsSessions		Defines whether users are able to log in to the CG Tools software transparently using their existing Microsoft® Windows® login for the current session. Transparent login only occurs if the Requires password box ⌐562¬ on the Add/Edit User dialog box ⌐560¬ is cleared for that user account (the PasswordRequired tag is set to No). If this box is checked (the PasswordRequired tag is set to Yes) for the user account in question, then the Clarity Log In dialog box ⌐595¬ will appear, ready for entry of an appropriate username and defined password. Configured using the Use Windows login sessions to login to Clarity on startup ⌐667¬ check box in the Advanced Options group box ⌐666¬ on the Users dialog tab ⌐665¬ on the Global Preferences dialog box ⌐654¬.
		Yes	When the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the Users.xml ⌐172¬ file, then CG Tools will log in transparently using that user account.
		No	When the CG Tools software is started on a Clarity Server, users will have to use their defined user name and password to log in to the CG Tools software. Defined on a per user basis using the Name tag and Password tag.

Contained within the `<UserList>` tag there should be one or more `<User>` tags.

Tag		Parameters	Description
User			Contains attributes that define a specific users' settings.
	Name		User name in upper case. Will not be seen by the user at any point during the application, but used internally for finding users whilst logging in.
		<name>	Case sensitive user name.
	DName		User display name. Displayed when editing users and to identify who is currently logged in. Configured using the Login Name text box ⌐561¬ in the General group box ⌐561¬ on the Add/Edit User dialog box ⌐560¬.
		<name>	User display name.
	Password		User password in an encrypted form. Configured using the Password text box ⌐561¬ in the General group box ⌐561¬ on the Add/Edit User dialog box ⌐560¬.
		<password>	User password.
	Description		Description of the user. Configured using the Description text box ⌐562¬ in the General group box ⌐561¬ on the Add/Edit User dialog box ⌐560¬.
		<description>	User description.
	PasswordRequired		Indicates whether a password is required for the user to log in. Configured using the Requires Password check box ⌐562¬ in the General group box ⌐561¬ on the Add/Edit User dialog box ⌐560¬.
		Yes	The user must have a password set against their name. They cannot have a blank password.
		No	The user does not need to have a password (although, they can still set one).

Tag		Parameters	Description
	Restricted		Defines whether the user is restricted to log in to individual servers in the current workgroup. Configured using the Restricted to specific systems check box [562] on the Add/Edit User dialog box [560].
		Yes	User is restricted to specific machines, specified within the `AllowedMachine` sub tag. If there are no machines defined and this tag is set to `Yes`, then the user will not be able to log in until at least one machine is defined.
		No	User can log onto any machine regardless.

Contained within the `<User>` tag there can be a variable amount of `<AllowedMachine>` tags.

Tag	Parameters	Description
AllowedMachine		Defined machines that the user can log in to.
	<DNS name>	Name of a specific machine that the user can log in to. This has to match exactly the computers DNS machine name. Configured using the controls in the Restricted to specific systems group box [562] on the Add/Edit User dialog box [560].

Also contained within the `<User>` tag there must be at least one `<AllowedFeature>` tag.

Tag	Parameters	Description
AllowedFeature		Defined features that the user has access to.
	<name>	Name of the feature that the user can use when they log in. This is basically the access rights that the user will have. Configured using the User Access Rights group box [564] on the Add/Edit User dialog box [560].
	All	User has complete access to every feature of the CG Tools software. Configured using the All check box in User Access Rights group box [564] on the Add/Edit User dialog box [560].

6.6　QuickLoads (V7.1.0.0>)

Due to a requirement for users and system administrators to be able to assign shortcuts to certain keys that will load jobs automatically, the QuickLoads methodology has been introduced. This complements the new user management system that was implemented in CG Tools software version 7.1.0.0. The concept of both Local 175 and User 175 QuickLoads exists.

Relevant dialog tabs enabling both local and user QuickLoads to be defined and activated have been created. Local QuickLoads are defined and activated using the Local QuickLoads dialog tab 722 on the Local Preferences dialog box 696. User QuickLoads are defined and activated using the User QuickLoads dialog tab 821 on the User Preferences dialog box 809. The user interface is almost identical on both dialog tabs. In the QuickLoads available list box, a grey entry is an inactive QuickLoad. Pressing the assigned shortcut key will do nothing, and this item will not appear in the menus. The list of available QuickLoads may feature an entry highlighted in red. This indicates that the QuickLoad has been set to action when the CG Tools software is started. This is set using the Load this file on application start-up check box.

SEE ALSO

Local QuickLoads 175
User QuickLoads 175
QuickLoad example 175
Assigning QuickLoad keys 175

6.6.1　Local QuickLoads

Local QuickLoads are applicable to every user on the system and can be configured by a system administrator to associate workgroup jobs (templates etc.) to designated shortcut key combinations on the local system that users will access regularly. QuickLoads that are active for the current system also appear in the File> 378 QuickLoads>Local QuickLoads 383 menu.

6.6.2　User QuickLoads

User QuickLoads enable the current user to associate their favourite jobs that they use regularly to designated shortcut key combinations. QuickLoads that are active for the current user also appear in the File> 378 QuickLoads>User QuickLoads 383 menu.

NOTE

QuickLoads that are configured and made active using the User QuickLoads dialog tab will override those defined for the local system using the Local QuickLoads dialog tab 722 on the Local Preferences dialog box 696.

6.6.3　QuickLoad example

A system administrator activates a local QuickLoad ID1 and subsequently assigns the PPQuickLoad1 extended key action to the F2 shortcut key. If a different user then logs onto the same machine and presses F2 whilst the CG Tools software is running, it will load the job assigned to local QuickLoad ID1. If the same user on the same machine then activates a user QuickLoad ID1, and the same user subsequently presses F2, the CG Tools software will load the job assigned to user QuickLoad ID 1. Any other user on the local machine will load the job assigned to local QuickLoad ID1.

6.6.4　Assigning QuickLoad keys

Any local or user QuickLoad can be assigned to a shortcut key. This is optional as active QuickLoads can also be opened using either the File> 378 QuickLoads>Local QuickLoads 383 or File> 378 QuickLoads>User QuickLoads 383 menu commands. QuickLoad keys are assigned in the normal manner in the same way as any other shortcut key. There are ten extended key actions that relate to the ten available QuickLoads (PPQuickLoad 1 through to PPQuickLoad 10).

To assign a QuickLoad key, follow the steps below:

1.　Select Options> 429 Preferences>Local Preferences 430. The Local Preferences dialog box 696 is displayed.
2.　Select the Keyboard dialog tab 718.

3. In the Extended Keyboard group box ⌐719¬, select the Edit ⌐719¬ button. The Extended Keyboard Map dialog box ⌐639¬ is displayed.
4. Select the Add ⌐640¬ button. The Extended Key Editor dialog box ⌐638¬ is displayed.
5. Using the Extended Key Action drop-down list box ⌐639¬, select the desired QuickLoad extended key action (`PPQuickLoad 1` through to `PPQuickLoad 10`).
6. Select the Set From Keystrokes button ⌐639¬ and then enter your key sequence.
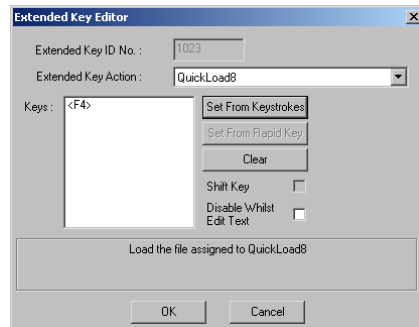
7. Select OK to close the Extended Key Editor dialog box.
8. Select Save to save the changes to the keyboard map file, then select Close.
9. Select OK to close the Local Preferences dialog box.

6.7　Keyboards

Your Clarity system or CG Tools software will be equipped with one of the following keyboards:

Keyboard	Description	Picture
Standard keyboard 178	The Standard keyboard is supplied as standard with Clarity 100.	
Optional Version 1 179 RapidAction keyboard 179	The Version 1 RapidAction keyboard was supplied as standard with 5U Clarity systems and Clarity 200 (optional for Clarity 100 and offline software derivatives e.g. Clarity PREP). It provided a variety of dedicated keys to give fast access to commonly used character generator functions. Now superseded by version 2.	
Optional Version 2 183 RapidAction keyboard 183	The Version 2 RapidAction keyboard is currently supplied as standard with 5U Clarity systems and Clarity 200 and 300 systems (optional for Clarity 100 and offline software derivatives e.g. Clarity PREP). It provides a larger number of dedicated keys (40) compared to the Version 1 RapidAction keyboard 179. The Version 2 RapidAction keyboard also features some illuminated keys to help inform the operator of the current state of the system, software and playout status.	

Throughout this documentation, keyboard shortcuts that are used for performing tasks are labelled. The table below defines the function keys used in the majority of shortcuts:

Key	Description
Left CTRL	Control key at bottom left of keyboard.
Left SHIFT	Shift key at bottom left of keyboard.
Left ALT	Alt key at bottom left of keyboard.
Right SHIFT	Shift key at bottom right of keyboard.
Left WINDOWS	Windows logo key at bottom left of keyboard.

6.7.1   Standard keyboard

The Standard keyboard is supplied as standard with Clarity 100.

Click on a balloon to find out more (online documentation only).

Area	Description
Function keys ⌐192⌐	The F4 key and the second and third groups of functions keys enable channel selection and the selection Down Stream Keying (DSK) modes.
Numeric keypad keys ⌐193⌐	The keys on the numeric keypad provide access to a number of shortcuts.
Miscellaneous keys ⌐199⌐	The miscellaneous keys provide access to a number of shortcuts.

SEE ALSO

Generic key reference ⌐185⌐
Keyboard shortcut reference ⌐201⌐

6.7.2   RapidAction keyboard mapping files (.EKM)

Supported RapidAction keyboards have their key presses interpreted by a special file with an .EKM file extension. On occasions, you may need to change the extended keyboard file used by the software to map keyboard shortcuts to specific software functions. This will be the case when changing languages or changing between a Version 1 ⌐179⌐ and Version 2 ⌐183⌐ RapidAction keyboard.

The .EKM file currently being used can be changed on the Keyboard dialog tab ⌐718⌐ on the Local Preferences dialog box ⌐696⌐ (Options> ⌐429⌐ Local Preferences ⌐430⌐). Click on the links to learn about more about setting up a Version 1 ⌐182⌐ or Version 2 ⌐185⌐ RapidAction keyboard.

The default installation location for .EKM files is:

`C:\Program Files\Pixel Power Ltd\CG Tools 7.1\SubFiles`

The table below details the available .EKM mapping files and their purpose, enabling you to select the correct file when necessary.

Filename	Description	RapidAction keyboard	
		Version 1 ⌐179⌐	Version 2 ⌐183⌐
`ExtendedKeyboardMap.ekm`	Default Version 1 RapidAction keyboard mapping file (UK and US English).	■	
`ExtendedKeyboardMap_French.ekm`	Version 1 RapidAction keyboard mapping file (French).	■	
`ExtendedKeyboardMap_French_NoDSK.ekm`	Version 1 RapidAction keyboard mapping file (French) with no support for DSK functions.	■	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   178

Copyright © 2000-2006 Pixel Power Ltd.

`ExtendedKeyboardMap_German.ekm`	Version 1 RapidAction keyboard mapping file (German).	■	
`ExtendedKeyboardMap_German_NoDSK.ekm`	Version 1 RapidAction keyboard mapping file (German) with no support for DSK functions.	■	
`ExtendedKeyboardMap_NoDSK.ekm`	Default Version 1 RapidAction keyboard mapping file (UK and US English) with no support for DSK functions.	■	
`ExtendedKeyboardMap_v2.ekm`	Default Version 2 RapidAction keyboard mapping file (UK and US English).		■
`ExtendedKeyboardMap_v2_NoDSK.ekm`	Version 2 RapidAction keyboard mapping file (UK and US English) with no support for DSK functions.		■
`ExtendedKeyboardMap_v2_with_quickload.ekm`	Version 2 RapidAction keyboard mapping file (UK and US English) with support for QuickLoads 175.		■

6.7.3   Version 1 RapidAction keyboard (legacy)

The Version 1 RapidAction keyboard was supplied as standard with 5U Clarity systems and Clarity 200 (optional for Clarity 100 and offline software derivatives e.g. Clarity PREP) provides a variety of dedicated keys (24) to give fast access to commonly used character generator functions.

Click on a balloon to find out more (online documentation only).

Area	Description
LED display 182	The RapidAction keyboard has a single digit LED display. This is not currently used and will display "1" during normal operation.
RapidAction keys 185	The 24 RapidAction keys have one or two functions associated with them. The second function (labelled in blue) is accessed by pressing and holding the left-hand CTRL operator key. Some keys have further functions that are utilised using further combinations of the left-hand SHIFT and CTRL operator keys.

Area	Description
Function keys and RapidAction function keys [192]	The F4 key and the second and third groups of functions keys enable channel selection and the selection Down Stream Keying (DSK) modes.
Numeric keypad keys [193]	The keys on the numeric keypad provide access to a number of shortcuts. On RapidAction keyboards, these keys have special legends relating to their function.
Miscellaneous keys [199]	The miscellaneous keys provide access to a number of shortcuts. On RapidAction keyboards, these keys have special legends relating to their function.

SEE ALSO

6.7.3.1   Dedicated key layout

The illustration below shows the dedicated keys available with the Version 1 RapidAction keyboard layout.

181   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.7.3.2 LED display

The RapidAction keyboard has a single digit LED display. This is not currently used and will display "1" during normal operation.

6.7.3.3 Setting up a Version 1 RapidAction keyboard

A Version 1 RapidAction keyboard must be programmed before the 24 RapidAction keys will function correctly. This is normally done as part of the manufacturing process for the keyboard. The following procedure can be used if it becomes necessary to re-establish the programming.

With the CG Tools software running, follow the steps below:

1. Select Options> 429 Local Preferences 430. The Local Preferences dialog box 696 is displayed.
2. Select the Keyboard dialog tab 718.
3. Ensure that the Extended Keyboard Options On/Off box is checked.
4. Ensure that the RapidAction Keyboard Version 1 (Cream, 24 Key, Red Numeric Display) option is selected.
5. Ensure that a valid .EKM mapping file 178 is selected in the Extended Keyboard File text box.
6. Select the Reprogram RapidAction Keyboard button 720 to program the keyboard if you have had to change the .EKM mapping file.

NOTES

All of the KVM extenders we have tried with the keyboard block the keyboard programming commands. This means that the keyboard must be plugged directly into the Clarity system unit or PC running the Clarity PREP software in order for this operation to be successful. See Using keyboard extenders 209 for more information.

6.7.4   Version 2 RapidAction keyboard (current)

The Version 2 RapidAction keyboard is currently supplied as standard with 5U Clarity systems and Clarity 200 and 300 systems (optional for Clarity 100 and offline software derivatives e.g. Clarity PREP). It provides a larger number of dedicated keys (40) compared to the Version 1 RapidAction keyboard 179. The Version 2 RapidAction keyboard also features some illuminated keys to help inform the operator of the current state of the system, software and playout status.

Click on a balloon to find out more (online documentation only).

Area	Description
RapidAction keys 188	The 40 RapidAction keys have one or two functions associated with them. The second function (labelled in blue) is accessed by pressing and holding the left-hand CTRL operator key. Some keys have further functions that are utilised using further combinations of the left-hand SHIFT and CTRL operator keys.
Numeric keypad keys 193	The keys on the numeric keypad provide access to a number of shortcuts. On RapidAction keyboards, these keys have special legends relating to their function.
Miscellaneous keys 199	The miscellaneous keys provide access to a number of shortcuts. On RapidAction keyboards, these keys have special legends relating to their function.

SEE ALSO

6.7.4.1   Dedicated key layout

The illustration below shows the dedicated keys available with the Version 2 RapidAction keyboard layout.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   184

Copyright © 2000-2006 Pixel Power Ltd.

6.7.4.2   Setting up a Version 2 RapidAction keyboard

A Version 2 RapidAction keyboard is be programmed as part of the manufacturing process and CANNOT be re-programmed as with the Version 1 RapidAction keyboard.

To select the correct RapidAction keyboard version, with the CG Tools software running, follow the steps below:

1.   Select Options> [429] Local Preferences [430]. The Local Preferences dialog box [696] is displayed.
2.   Select the Keyboard dialog tab [718].
3.   Ensure that the Extended Keyboard Options On/Off box is checked.
4.   Ensure that the RapidAction Keyboard Version 2 (Blue, 40 Key, Blue LEDs) option is selected.
5.   Ensure that a valid .EKM mapping file [178] is selected in the Extended Keyboard File text box.

6.7.5   Key reference

This section details the action of specific keys and available key combinations using these keys in conjunction with the SHIFT, CTRL and ALT operator keys. Information relating to each specific keyboard type is shown using colour coded tables. The following conventions are used:

Keyboard	Description
Standard keyboard [178]	Information pertaining to the standard keyboard is shown using this table colour.
Optional Version 1 [179] RapidAction keyboard [179]	Information pertaining to the optional Version 1 RapidAction keyboard is shown using this table colour.
Optional Version 2 [183] RapidAction keyboard [183]	Information pertaining to the optional Version 2 RapidAction keyboard is shown using this table colour.

SEE ALSO

RapidAction keys [185]
Function keys [192]
Numeric keypad keys [193]
Miscellaneous keys [199]

6.7.5.1   RapidAction keys

RapidAction keyboards feature a number of dedicated keys that perform specific functions. This section describes the action of each key in detail.

RapidAction keyboard version 1 [185]
RapidAction keyboard version 2 [188]

6.7.5.1.1   RapidAction keyboard version 1

The 24 RapidAction keys have one or more functions associated with them. Secondary functions are accessed using combinations of the left-hand SHIFT and CTRL operator keys. All key combinations available for each RapidAction key are listed in the table below. The availability of key functions when working Offline and/or Online is also indicated. Keys are listed in alphabetical order.

Black [186]	Font [186]	Logo [187]	Style Apply [188]
Cntr Pg Horizon [186]	Font Height [186]	Read [187]	Style Pick [188]
Cntr Row [186]	Goto Field [186]	Save Current Job [187]	
Delete Row [186]	Insert Text Layer [187]	Store [187]	
Erase Layer [186]	Insert Row [187]	Style A-H [187]	

Black			Available
Sets the current page background to black.			Online Offline
+ Left SHIFT	Picture Bgnd	Displays the Open Background Picture dialog box [748] where you can select a background picture for the currently selected page. Also available using Page> [390] Change Background [392].	Online Offline

Cntr Pg Horizon			Available
Only valid whilst editing a text page. Centres the text page horizontally. Also available using Text> [408] Text Justification>Centre [413].			Online Offline
+ Left SHIFT	Cntr Pg Vertical	Only valid whilst editing a text page. Centres the text page vertically. Also available using Text> [408] Text Justification>Centre Vertically [628].	Online Offline

Cntr Row			Available
Only valid whilst editing a text page. Centres the row of text containing the text cursor. Also available using Text> [408] Text Justification>Centre [413].			Online Offline

Delete Row			Available
Only valid whilst editing a text page. Deletes the row of text containing the text cursor.			Online Offline

Erase Layer			Available
Deletes the currently selected page element or group of elements from the page open in the Graphic Edit window [260]. Also available using Edit(Job)> [384] Delete [386].			Online Offline
+ Left SHIFT	Erase Page	Deletes the page or group of pages currently selected in the Page Browser [251] or Page List [252]. Also available using Edit(Job)> [384] Delete [386].	Online Offline

Font			Available
Only valid whilst editing a text page, line or spline. Selects the Font drop-down list box on the relevant control set [300] on the Graphic Tools [266]. Select a font from the drop-down list box.			Online Offline
+ Left SHIFT	Browse	Displays the Open Job dialog box [750] where you can select a new job to open. If there are any unsaved changes within the current job, a message will appear asking if you want to save the changes before the job is closed. Also available using File> [378] Open Job [380].	Online Offline

Font Height			Available
Only valid whilst editing a text page, line or spline. Selects the Height increment box on the relevant control set [300] on the Graphic Tools [266].			Online Offline
+ Left SHIFT	Font Width	*Only valid whilst editing a text page, line or spline.* Selects the Width increment box on the relevant control set [300] on the Graphic Tools [266].	Online Offline

Goto Field			Available
+ Numeric keypad number		*Only valid whilst editing a text page.* Enables the movement of the text cursor to a specified field, ready for typing. Must enter field numeric ID using the numeric keypad before pressing Goto Field. Num Lock must be ON.	Online Offline
+ Left SHIFT	Insert Field	Only valid whilst editing a text page. Inserts a field marker at the current text cursor position. Also available using Text> [408] Markers> [411] Insert>Field [411]	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   186

Copyright © 2000-2006 Pixel Power Ltd.

Insert Text Layer			Available
Inserts a new text page layer on the current page open in the Graphic Edit window 260. Also available using Text> 408 Text Page 410.			Online Offline

Insert Row			Available
Only valid whilst editing a text page. Inserts a new row above the row of text containing the text cursor			Online Offline

Logo			Available
Only valid whilst editing a text page. Displays the Insert Logo dialog box 673 where you can select a logo file to insert. Also available using Text> 408 Insert Logo 416.			Online Offline
+ Left SHIFT	Cell	Insert a new cel graphic layer, except when editing a text page when it will insert a cel into the text layer at the current edit position. Displays the Insert Cel Animation dialog box 751. Also available using Graphics> 395 Cels / Video>Cel Animation 404 and Text> 408 Insert Cel 417.	Online Offline

Read			Available
+ Numeric keypad number		Closes the current page and opens the page corresponding to the number entered on the numeric keypad. Must enter a page number using the numeric keypad before pressing Read. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser 251 or Page List 252 until they are edited. Num Lock must be ON. Also available using Page> 390 Goto 391.	Online Offline

Save Current Job			Available
Saves the current job. If the job has not been saved, the Save Clarity Job dialog box 781 appears where you can specify a name and save the current job. If an unsaved page stack was open, the Save Stack As dialog box 784 appears where you can specify a name and save the current page stack. If the page currently open in the Graphic Edit window 260 has unsaved changes, you will be asked if you want to save or abort the changes on the current page before being given the opportunity to save the job.			Online Offline
+ Left SHIFT	Reset	Clears the current job from memory, including all caches. Equivalent to selecting File> 378 Reset>Job 384. If there are any unsaved changes within the current job, a message will appear asking if you want to save the changes before the job is reset.	Online Offline

Store	LED Status	*Not available*	Available
+ Numeric keypad number		Saves the current page open in the Graphic Edit window 260 to the page corresponding to the number entered on the numeric keypad page. Must enter a page number using the numeric keypad before pressing Store. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser 251 or Page List 252 until they are edited.	Online Offline
	+ CTRL + SHIFT	Additionally clears all links to global fields on the stored page, and then re-edits the original page.	

Style A - H			Available
When editing a text page or text element, applies the specified style (A-H) stored on the User Defined Styles control tab 298 to a selected text block or text element and enables its use for subsequent typing. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, applies (where applicable) the relevant size, position, colour, transparency and edge effect stored with the specified style (A-H). Styles must be defined before this function can be used.			Online Offline

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Style A - H			Available
+ Left SHIFT	Store Style A-H	When editing a text page or text element, stores the styling attributes of a selected text block or text element to the specified style (A-H) on the User Defined Styles control tab [298]. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, stores (where applicable) the relevant size, position, colour, transparency and edge effect to the specified style (A-H).	Online Offline
+ Left SHIFT	Style I-P	When editing a text page or text element, applies the specified style (I-P) stored on the User Defined Styles control tab [298] to a selected text block or text element and enables its use for subsequent typing. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, applies (where applicable) the relevant size, position, colour, transparency and edge effect stored with the specified style (I-P). Styles must be defined before this function can be used.	Online Offline
+ Left CTRL + Left SHIFT	Store Style I-P	When editing a text page or text element, stores the styling attributes of a selected text block or text element to the specified style (I-P) on the User Defined Styles control tab [298]. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, stores (where applicable) the relevant size, position, colour, transparency and edge effect to the specified style (I-P).	Online Offline

Style Apply			Available
		Only valid whilst editing a text page. Only valid when the Style Copy box is cleared on the Text Page control set [313]. Applies the current Graphic Tools [266] settings to a selected text block or text element. Also available using Edit(Job)> [384] Paste Style [387].	Online Offline
+ Left SHIFT	Style Browse	*Only valid whilst editing a text page.* Displays the User Defined Styles control tab [298] on the Graphic Tools [266].	Online Offline

Style Pick			Available
		Only valid whilst editing a text page. Only valid when the Style Copy box is cleared on the Text Page control set [313]. Copies the character styling of the character at the current text cursor position to the Graphic Tools [266]. Also available using Edit(Job)> [384] Copy Style [387].	Online Offline
+ Left SHIFT	Safe Area	Displays the Safe Area control tab [292] on the Graphic Tools [266] where you can specify safe area settings.	Online Offline

6.7.5.1.2 RapidAction keyboard version 2

The 40 RapidAction keys have one or more functions associated with them. Secondary functions are accessed using combinations of the left-hand SHIFT and CTRL operator keys. All key combinations available for each RapidAction key are listed in the table below. The availability of key functions when working Offline and/or Online is also indicated. Keys are listed in alphabetical order.

CH1 [189]	Grab [190]	Page [190]	Style A-H [191]
CH2 [189]	Insert Anim [190]	Prev Layer [190]	Style Apply [192]
CH3 [189]	Insert Cell [190]	Read Page [191]	Style Copy [192]
CH4 [189]	Insert Field [190]	Respace [191]	Style Pick [192]
DSK Bgnd [189]	Insert Logo [190]	Revert [191]	Update [192]
DSK Black [189]	Insert Text Layer [190]	Show Matte [191]	Word [192]
DSK Fgnd [189]	Line [190]	Still Store [191]	
DSK MIx [189]	Name Page [190]	Store Page [191]	
Field Lock [189]	Next Layer [190]	Style [191]	

CH1		LED Status	*Illuminated when in operation.*	Available
Select channel 1.				Online
+ Left CTRL		Add channel 1 to current selection of channels.		
+ Left SHIFT		Remove channel 1 from current selection of channels.		
CH2		LED Status	*Illuminated when in operation.*	Available
Select channel 1.				Online
+ Left CTRL		Add channel 2 to current selection of channels.		
+ Left SHIFT		Remove channel 2 from current selection of channels.		
CH3		LED Status	*Illuminated when in operation.*	Available
Select channel 3				Online
+ Left CTRL		Add channel 3 to current selection of channels.		
+ Left SHIFT		Remove channel 3 from current selection of channels.		
CH4		LED Status	*Illuminated when in operation.*	Available
Select channel 4				Online
+ Left CTRL		Add channel 4 to current selection of channels.		
+ Left SHIFT		Remove channel 4 from current selection of channels.		
DSK Bgnd		LED Status	*Illuminated when in operation.*	Available
Cut DSK mode to live video input for current channel.				Online
+ Left CTRL		Fade DSK mode to live video input for current channel.		
+ Left SHIFT		Cancel DSK, cut to CG output.		
DSK Black		LED Status	*Illuminated when in operation.*	Available
Cut DSK mode to black.				Online
+ Left CTRL		Fade DSK mode to black.		
+ Left SHIFT		Cancel DSK, cut to CG output.		
DSK Fgnd		LED Status	*Illuminated when in operation.*	Available
Cut DSK mode to CG output for current channel.				Online
+ Left CTRL		Fade DSK mode to CG output for current channel.		
+ Left SHIFT		Cancel DSK, cut to CG output.		
DSK Mix		LED Status	*Illuminated when in operation.*	Available
Cut DSK mode as mix of both CG and live video outputs.				Online
+ Left CTRL		Fade DSK mode as mix of both CG and live video outputs.		
+ Left SHIFT		Cancel DSK, cut to CG output.		
Field Lock		LED Status	*Illuminated LED means function is turned on.*	Available
Toggles the locking of all page template field markers on ALL text layers on the current page. Page template fields can be locked, enabling field navigation using the Tab key. This is especially relevant when filling a page template manually. When this function is turned on, field markers are displayed in yellow instead of red. Also available using Text> [408] Markers>Lock Field [413].				Online Offline

Grab	LED Status	*Not available*	Available
Grab the current default live video source [79] to the background of the page currently being edited in the Graphic Edit window [260].			Online Offline
+ Left CTRL		Displays the Grab Video dialog box [669] where more advanced grab options can be specified. Also available using Background> [419] Grab Video Frame [420].	Online Offline

Insert Anim	LED Status	*Not available*	Available
Only valid whilst editing a text page. Inserts an animation marker at the current text cursor position. Displays the Animation Marker dialog box [565]. Also available using Text> [408] Markers>Insert>Animation [411].			Online Offline

Insert Cell	LED Status	*Not available*	Available
Insert a new cel graphic layer, except when editing a text page when it will insert a cel into the text layer at the current edit position. Displays the Insert Cel Animation dialog box [751]. Also available using Graphics> [395] Cels / Video>Cel Animation [404] and Text> [408] Insert Cel [417].			Online Offline

Insert Field	LED Status	*Not available*	Available
Only valid whilst editing a text page. Inserts a field marker at the current text cursor position. Also available using Text> [408] Markers>Insert>Field [411].			Online Offline

Insert Logo	LED Status	*Not available*	Available
Only valid whilst editing a text page. Displays the Insert Logo dialog box [673] where you can select a logo file to insert. Also available using Text> [408] Insert Logo [416].			Online Offline

Insert Text Layer			Available
Inserts a new text page layer on the current page open in the Graphic Edit window [260]. Also available using Text> [408] Text Page [410].			Online Offline

Line	LED Status	*Not available*	Available
Only valid whilst editing a text page, line or spline. Selects the line containing text cursor. When editing text pages, subsequent presses will select the next line in the current page.			Online Offline

Name Page	LED Status	*Not available*	Available
Change the name for the page currently selected in Page Browser [251]/Page List [252] to a user defined name. The Page Name field for the current page is selected, ready for editing. Also available using Page> [390] Change Name [392].			Online Offline

Next Layer	LED Status	*Not available*	Available
Selects the next graphic element drawn in relation to the selected element on the current layer of the page currently open in the Graphic Edit window [260]. Also available using Graphics> [395] Select>Next Graphic [397].			Online Offline

Page	LED Status	*Not available*	Available
Only valid whilst editing a text page, line or spline. Toggles the selection of an entire text object containing text cursor. Applies to text lines (selects entire line), text splines (selects entire line) and text pages (selects entire page).			Online Offline

Prev Layer	LED Status	*Not available*	Available
Selects the previous graphic element drawn in relation to the selected element on the current layer of the page currently open in the Graphic Edit window [260]. Also available using Graphics> [395] Select> [397] Previous Graphic [397].			Online Offline

Read Page		LED Status	*Not available*	Available
+ Numeric keypad number		Closes the current page and opens the page corresponding to the number entered on the numeric keypad or page flagged using the [Next Free key]⌐193⌐. Must enter a page number using the numeric keypad or press the [Next Free key]⌐193⌐ before pressing Read. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the [Page Browser]⌐251⌐ or [Page List]⌐252⌐ until they are edited. Also available using [Page>]⌐390⌐[Goto]⌐391⌐.	Online Offline
+ [Next Free]⌐193⌐			

Respace		LED Status	*Not available*	Available
Re-spaces the selected block of text (character, word, line, marked block or page) using the values stored on the [Text Page control set]⌐313⌐ on the [Graphic Tools]⌐266⌐. Also available using [Text>]⌐408⌐[Respace]⌐416⌐.				Online Offline

Revert		LED Status	*Not available*	Available
Reverts the current page in the [Graphic Edit window]⌐260⌐ back to its previous saved state shown by the page preview in the [Page Browser]⌐251⌐. Also available using [Page>]⌐390⌐[Revert]⌐394⌐. [Update/Revert]⌐547⌐ edit mode must be turned on.				Online Offline

Show Matte		LED Status	*Illuminated LED means function is turned on.*	Available
Toggles the display of the key channel displayed in the background layer of current pages. Also available using the Display Key check box on the [Key and Grid Settings control tab]⌐285⌐ on the [Graphics Tools]⌐315⌐ .				Online Offline

Still Store		LED Status	*Not available*	Available
Displays the [Save Still dialog box]⌐784⌐. Also available using [Background>]⌐419⌐[Save Background As Still]⌐420⌐.				Online Offline
+ Left CTRL		Displays the [Save Background Image dialog box]⌐781⌐ where the current page background can be saved. Also available using [Background>]⌐419⌐[Save Background]⌐420⌐.		Online Offline

Store Page		LED Status	*Not available*	Available
+ Numeric keypad number		Saves the current page open in the [Graphic Edit window]⌐260⌐ to the page corresponding to the number entered on the numeric keypad page or the page flagged using the [Next Free key]⌐193⌐. Must enter a page number using the numeric keypad or press the [Next Free key]⌐193⌐ before pressing Store Page. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the [Page Browser]⌐251⌐ or [Page List]⌐252⌐ until they are edited.	Online Offline
+ [Next Free]⌐193⌐			
	+ Left CTRL + Left SHIFT	Additionally clears all links to global fields on the stored page, and then re-edits the original page.	
+ Left CTRL		Saves the current page open in the [Graphic Edit window]⌐260⌐ to the next free page number after the current page.	

Style		LED Status	*Not available*	Available
With a graphic element selected in the [Graphic Edit window]⌐260⌐, directs focus to the relevant control set in the [Static control area]⌐300⌐ on the Graphic Tools, thus enabling configuration of styling attributes using the cursor keys (e.g. font, font height etc.)				Online Offline

Style A - H		LED Status	*Not available*	Available
When editing a text page or text element, applies the specified style (A-H) stored on the [User Defined Styles control tab]⌐298⌐ to a selected text block or text element and enables its use for subsequent typing. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, applies (where applicable) the relevant size, position, colour, transparency and edge effect stored with the specified style (A-H). Styles must be defined before this function can be used.				Online Offline

Style A - H		LED Status	*Not available*	Available
+ Left CTRL	**Store Style A-H**	When editing a text page or text element, stores the styling attributes of a selected text block or text element to the specified style (A-H) on the User Defined Styles control tab [298]. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, stores (where applicable) the relevant size, position, colour, transparency and edge effect to the specified style (A-H).	Online Offline
+ Left SHIFT	**Style I-P**	When editing a text page or text element, applies the specified style (I-P) stored on the User Defined Styles control tab [298] to a selected text block or text element and enables its use for subsequent typing. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, applies (where applicable) the relevant size, position, colour, transparency and edge effect stored with the specified style (I-P). Styles must be defined before this function can be used.	Online Offline
+ Left CTRL + Left SHIFT	**Store Style I-P**	When editing a text page or text element, stores the styling attributes of a selected text block or text element to the specified style (I-P) on the User Defined Styles control tab [298]. When editing a rectangle, rounded rectangle, cutout, paste live object, cel animation or foreground video clip, stores (where applicable) the relevant size, position, colour, transparency and edge effect to the specified style (I-P).	Online Offline

Style Apply	LED Status	*Not available*	Available
Only valid whilst editing a text page. Only valid when the Style Copy box is cleared on the Text Page control set [313]. Applies the current Graphic Tools [266] settings to a selected text block or text element. Also available using Edit(Job)> [384] Paste Style [387].			Online Offline

Style Copy	LED Status	*Illuminated LED means function is turned on.*	Available
Only valid whilst editing a text page. Toggles the Style Copy function (automatically pick up the styling from the character underneath the cursor). Also available using the Style Copy check box on the Text Page static control area [313] on the Graphic Tools [266]. The style copy functionality can be configured to be always off, always on or user changeable. This functionality can be configured using the Lock Style Copy drop-down list box [815] on the Edit dialog tab [810] on the User Preferences dialog box [809].			Online Offline

Style Pick	LED Status	*Not available*	Available
Only valid whilst editing a text page. Only valid when the Style Copy box is cleared on the Text Page control set [313]. Copies the character styling of the character at the current text cursor position to the Graphic Tools [266]. Also available using Edit(Job)> [384] Copy Style [387].			Online Offline

Update	LED Status	*Not available*	Available
Saves edits to the current page in the Graphic Edit window [260] and updates the page preview in the Page Browser [251]. Also available using Page> [390] Update [394]. Update/Revert [547] edit mode must be turned on.			Online Offline

Word	LED Status	*Not available*	Available
Only valid whilst editing a text page, line or spline. Selects the word containing the text cursor. Subsequent presses will select further words in the current line or page.			Online Offline

6.7.5.2   Function keys

The second and third groups of functions keys enable channel selection and the selection Down Stream Keying (DSK) modes on the Standard keyboard and version 1 of the RapidAction keyboard. All keys only work whilst Online.

Remember the display conventions [185] for the tables below.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   192

Copyright © 2000-2006 Pixel Power Ltd.

Key(s)		Online	Details		
Top Legend	Front Legend		Action	+CTRL	+SHIFT
CH1	F5		Select channel 1.	Add channel 1 to current selection of channels.	Remove channel 1 from current selection of channels.
F5			Select channel 1	Add channel 1 to current selection of channels.	Remove channel 1 from current selection of channels.
CH2	F6		Select channel 2.	Add channel 2 to current selection of channels.	Remove channel 2 from current selection of channels.
F6			Select channel 2.	Add channel 2 to current selection of channels.	Remove channel 2 from current selection of channels.
CH3	F7		Select channel 3.	Add channel 3 to current selection of channels.	Remove channel 3 from current selection of channels.
F7			Select channel 3.	Add channel 3 to current selection of channels.	Remove channel 3 from current selection of channels.
CH4	F8		Select channel 4.	Add channel 4 to current selection of channels.	Remove channel 4 from current selection of channels.
F8			Select channel 4.	Add channel 4 to current selection of channels.	Remove channel 4 from current selection of channels.
DSK Fgnd	F9		Cut DSK mode to CG output.	Fade DSK mode to CG output.	Cancel DSK, cut to CG output.
F9			Cut DSK mode to CG output.	Fade DSK mode to CG output.	Cancel DSK, cut to CG output.
DSK Bgnd	F10		Cut DSK mode to live video input.	Fade DSK mode to live video input.	Cancel DSK, cut to CG output.
F10			Cut DSK mode to live video input.	Fade DSK mode to live video input.	Cancel DSK, cut to CG output.
DSK Mix	F11		Cut DSK mode as mix of both CG and live video outputs.	Fade DSK mode as mix of both CG and live video outputs.	Cancel DSK, cut to CG output.
F11			Cut DSK mode as mix of both CG and live video outputs.	Fade DSK mode as mix of both CG and live video outputs.	Cancel DSK, cut to CG output.
DSK Black	F12		Cut DSK mode to black.	Fade DSK mode to black.	Cancel DSK, cut to CG output.
F12			Cut DSK mode to black.	Fade DSK mode to black.	Cancel DSK, cut to CG output.

6.7.5.3   Numeric keypad keys

The keys on the numeric keypad provide access to a number of shortcuts. On RapidAction keyboards, these keys have special legends relating to their function and are often identical for both versions. Standard keyboard legends are referenced for the Standard keyboard. All keys work in both Online and Offline mode. Where applicable, keys that have specific relevance only in Online mode are indicated.

Remember the for the tables below.

Key(s)		Online	Details		
Top Legend	Front Legend		**Action**	**+Operator Key(s)**	**Action**
Num Lock		■			
LED Status			*Illuminated when in operation.*		
Num Lock		■	Same as above.		
Num Lock		■	Same as above.		
TOP 193			Action	+Operator Key(s)	Action
Page		■	Switch to Page Mode		
			Illuminated when in operation.		
Page	/	■	Same as above.		
/		■	Same as above.		
TOP 193			Action	+Operator Key(s)	Action
Stack		■	Switch to Stack Mode. Must have a page stack open containing a least one page.		
LED Status			*Illuminated when in operation.*		
Stack	*	■	Same as above.		
*		■	Same as above.		
TOP 193			Action	+Operator Key(s)	Action
Chan		■	Toggle through selection of available channels.		
	-	■	Same as above.		
-		■	Same as above.		
TOP 193			Action	+Operator Key(s)	Action
Cue		■		+ Numeric keypad number (needs to entered before pressing Cue).	Cue the page corresponding to the number entered on the numeric keypad.
Cue	+	■		Same as above.	Same as above.
+		■		Same as above.	Same as above.
TOP 193			Action	+Operator Key(s)	Action
Take	Enter	■	Take the currently cued page on the current selected channel(s).		
				+ Numeric keypad number (needs to entered before pressing Take). Num Lock must be ON.	Cue and then take the page corresponding to the number entered on the numeric keypad on the current selected channel(s).
				+ Left CTRL	Take the page currently open in the Graphic Edit window 266 (the Graphic Edit window must have focus) on the current selected channel(s)

Key(s)		Online	Details		
Take	Enter	■	Same as above.		
				Same as above.	Same as above.
				+ Left CTRL	Same as above.
ENTER		■	Same as above.		
				Same as above.	Same as above.
				+ Left CTRL	Same as above.
TOP 193			**Action**	**+Operator Key(s)**	**Action**
7	Home				
7 and Word	Home		Toggle selection of word containing text cursor (applies to text lines, text splines and text pages). Num Lock must be OFF.		
7	HOME		Same as above.		
TOP 193			**Action**	**+Operator Key(s)**	**Action**
8	UP ARROW				
8 and Line	UP ARROW		Toggle selection of line containing text cursor (applies to text lines, text splines and text pages). Num Lock must be OFF.		
8	UP ARROW		Same as above.		
TOP 193			**Action**	**+Operator Key(s)**	**Action**
9	Pg Up				
9 and Page	PgUp		Toggle selection of entire text object containing text cursor. Applies to text lines (selects entire line), text splines (selects entire line) and text pages (selects entire page). Num Lock must be OFF.		
9	PGUP		Same as above.		
TOP 193			**Action**	**+Operator Key(s)**	**Action**

Key(s)		Online	Details		
Next Free	Del				Find the next free (un-edited) page in the current job before pressing Read Page 191 or Store Page 191. The next free page in the Page List is searched from the current page open for editing. Where the next free page is searched from can be configured using the Next Free Page group box 817 on the General dialog tab 816 on the User Preferences dialog box 809.
			+ Numeric keypad number (needs to entered before pressing the Next Free key).		Find the next free (un-edited) page in the current job before pressing Read Page 191 or Store Page 191. The next free page in the Page List is searched from page number entered using the numeric keypad.
. and Spacing	Del			Left Arrow	Reduce character spacing to the left of the current text cursor position. Num Lock must be OFF.
				Right Arrow	Increase character spacing to the left of the current text cursor position. Num Lock must be OFF.
				Up Arrow	Reduce line spacing above the line of text containing the text cursor. Num Lock must be OFF.
				Down Arrow	Increase line spacing above the line of text containing the text cursor. Num Lock must be OFF.
.	Del			Left Arrow	Same as above.
				Right Arrow	Same as above.
				Up Arrow	Same as above.
				Down Arrow	Same as above.
TOP 193			Action	+Operator Key(s)	Action
0	Ins				

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   196

Copyright © 2000-2006 Pixel Power Ltd.

Key(s)		Online	Details		
0 and Size	Ins			Left Arrow	Reduce width of selected text. Num Lock must be OFF.
				Right Arrow	Increase width of selected text. Num Lock must be OFF.
				Up Arrow	Increase height and width of selected text (maintains ratio). Num Lock must be OFF.
				Down Arrow	Reduce height and width of selected text (maintains ratio). Num Lock must be OFF.
0 and Ins				Left Arrow	Same as above.
				Right Arrow	Same as above.
				Up Arrow	Same as above.
				Down Arrow	Same as above.
TOP 193			Action	+Operator Key(s)	Action
1	End				
1 and Move	End			Left Arrow	Move selected text block or page element left. Num Lock must be OFF.
				Right Arrow	Move selected text block or page element right. Num Lock must be OFF.
				Up Arrow	Move selected text block or page element up. Num Lock must be OFF.
				Down Arrow	Move selected text block or page element down. Num Lock must be OFF.
1 and End				Left Arrow	Same as above.
				Right Arrow	Same as above.
				Up Arrow	Same as above.
				Down Arrow	Same as above.
TOP 193			Action	+Operator Key(s)	Action
2	DOWN ARROW				

Key(s)		Online	Details		
2 and Justify	DOWN ARROW			Left Arrow	Left justify selected text or line of text containing the text cursor within a text page. Num Lock must be OFF.
				Right Arrow	Right justify selected text or line of text containing the text cursor within a text page. Num Lock must be OFF.
				Up Arrow	Centre justify selected text or line of text containing the text cursor within a text page. Num Lock must be OFF.
				Down Arrow	Fully justify line of text containing the text cursor about text cursor within a text page. Num Lock must be OFF.
2	DOWN ARROW			Left Arrow	Same as above.
				Right Arrow	Same as above.
				Up Arrow	Same as above.
				Down Arrow	Same as above.
TOP 193			**Action**	**+Operator Key(s)**	**Action**
3	Pg Dn				
ExpCmp	3 and PgDn			Left Arrow	Compress character spacing of selected text or text to the right of the current text cursor position. Num Lock must be OFF.
				Right Arrow	Expand character spacing of selected text or text to the right of the current text cursor position. Num Lock must be OFF.
				Up Arrow	Compress inter-line spacing of selected text or the line of text containing the text cursor and any subsequent lines. Num Lock must be OFF.

Key(s)		Online	Details		
				Down Arrow	Expand inter-line spacing of selected text or the line of text containing the text cursor and any subsequent lines. Num Lock must be OFF.
3	PgDn			Left Arrow	Same as above.
				Right Arrow	Same as above.
				Up Arrow	Same as above.
				Down Arrow	Same as above.

6.7.5.4 Miscellaneous keys

There are several miscellaneous keys featured on all keyboards.

Remember the for the tables below.

Key(s)		Online	Details		
Top Legend	Front Legend		**Action**	**+Operator Key(s)**	**Action**
Prt Scr	Sys Rq		N/A		
Prt Scr	Sys Rq		N/A		
Prt Scr	Sys Rq		N/A		
TOP 199			Action	+Operator Key(s)	Action
Scroll Lock			Toggle text page scrolling.		
Scroll Lock			Same as above.		
Scroll Lock			Same as above.		
TOP 199			Action	+Operator Key(s)	Action
Pause Break			N/A		
Pause	Break		N/A		
Break			N/A		
TOP 199			Action	+Operator Key(s)	Action
Insert	Faster	■	Toggles text insert/overwrite mode.	Left CTRL	Whilst online, speeds up foreground rolls, crawls, animation or cel animations.
Speed Up	Insert	■	Same as above.	Left CTRL	Same as above.
Insert		■	Same as above.	Left CTRL	Same as above.
TOP 199			Action	+Operator Key(s)	Action
Home	Pause	■		Left CTRL	Whilst online, pauses playout.
			Whilst editing a text page, moves to the start of the current line containing the text cursor.	Left CTRL	Whilst editing a text page, moves to the start of the page.
Pause	Home	■		Left CTRL	Same as above.

Key(s)		Online	Details		
			Same as above	Left CTRL	Same as above.
Home		■		Left CTRL	Same as above.
			Same as above	Left CTRL	Same as above.
TOP |199|		**Action**	**+Operator Key(s)**	**Action**
Prev		■		Left CTRL	Whilst online, prepares previous page.
			With a page open in the Graphic Edit window, opens previous page in the Page Browser |251| or Page List |252|.		
			Whilst editing a text page, moves to the first line of the text page.		
PgUp		■		Left CTRL	Same as above.
			Same as above.		
			Same as above.		
PgUp		■		Left CTRL	Same as above.
			Same as above.		
			Same as above.		
TOP |199|		**Action**	**+Operator Key(s)**	**Action**
Delete	Slower	■	Whilst online, slows down foreground rolls, crawls, animation or cel animations.		
Slow Down	Delete	■	Same as above.		
Delete		■	Same as above.		
TOP |199|		**Action**	**+Operator Key(s)**	**Action**
End	Stop	■			Whilst online, stops playout.
			Whilst editing a text page, moves to the end of the current line containing the text cursor.	Left CTRL	Whilst editing a text page, moves to the end of the page.
Stop	End	■			Same as above.
			Same as above.	Left CTRL	Same as above.
End		■			Same as above
			Same as above.	Left CTRL	Same as above.
TOP |199|		**Action**	**+Operator Key(s)**	**Action**
Next		■		Left CTRL	Whilst online, prepares next page.
			With a page open in the Graphic Edit window |260|, opens next page in the Page Browser |251| or Page List |252|.		
			Whilst editing a text page, moves to the bottom line of the text page.		

Key(s)		Online	Details		
PgDn		■		Left CTRL	Same as above.
			Same as above.		
			Same as above.		
PgDn		■		Left CTRL	Same as above.
			Same as above.		
			Same as above.		
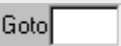
6.7.6 Keyboard shortcut reference

The following sections are available:

Section	Description
Shortcuts for use when the Job Edit window is selected 201	Keyboard shortcuts that apply when working explicitly with the Job Edit window 250.
Shortcuts for use when a Page Stack is selected 202	Keyboard shortcuts that apply when working explicitly with a Page Stack 325.
Shortcuts for use when working with a page in the Graphic Edit window 203	Keyboard shortcuts that apply when working explicitly within the Graphic Edit window 260.
Shortcuts for use whilst working Online 208	Keyboard shortcuts that apply when working explicitly online.

6.7.6.1 Shortcuts for use when the Job Edit window is selected

This section lists shortcut key combinations that perform selected actions available whilst working with the Job Edit window 250. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbar	Related menu command
Left CTRL + N		Standard 247	File> 378 New Job 379
Left CTRL + O		Standard 247	File> 378 Open Job 380
Left CTRL + S		Standard 247	File> 378 Save All 381
Left CTRL + X		Standard 247	Edit(Job)> 384 Cut 385
Left CTRL + C		Standard 247	Edit(Job)> 384 Copy 386
Left CTRL + V		Standard 247	Edit(Job)> 384 Paste 386
Left ALT + DELETE		Standard 247	Edit(Job)> 384 Delete 386
Left CTRL + Left SHIFT + DELETE			Edit(Job)> 384 Remove 386
Left CTRL + F			Edit(Job)> 384 Replace Foreground 386
Left CTRL + B			Edit(Job)> 384 Replace Background 387
Left CTRL + G	Goto		Page> 390 Goto 391
Left CTRL + A			Page> 390 Auto Set Name 391
Left CTRL + Left SHIFT + D			Toggles the default typing direction left-to-right or right-to-left for new text graphics. Same as Text> 408 Typing Direction>Right to Left Across Page 417 and Text> 408 Typing Direction>Left to Right Across Page 417.

Key Combination	Tool	Toolbar	Related menu command
Left CTRL + Left SHIFT + A			Toggles the typing of text against the natural text-flow. (This is useful for inserting English text within an Arabic sentence).
Left CTRL + Left SHIFT + R			Toggles whether to insert Latin or Arabic numbers.
F2 to F4			Action Local or User QuickLoad [175] location 1 to 3.
Left SHIFT + F2 to F4			Action Local or User QuickLoad [175] location 4 to 6.
F1			Help> [434] Contents and Index [434]
Left SHIFT + F1			Help> [434] What's This [434]

6.7.6.2 Shortcuts for use when a Page Stack is selected

This section lists shortcut key combinations that perform selected actions available whilst working with a Page Stack. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbar	Related menu command
Left CTRL + O		Standard [247]	File> [378] Open Stack [380]
Left CTRL + S		Standard [247]	File> [378] Save All [381]
ENTER			Edit(Stack)> [388] Edit Entry [388]
INSERT			Edit(Stack)> [388] Insert Entry [388]
Left CTRL + X		Standard [247]	Edit(Stack)> [388] Cut [388]
Left CTRL + C		Standard [247]	Edit(Stack)> [388] Copy [389]
Left CTRL + V		Standard [247]	Edit(Stack)> [388] Paste [389]
DELETE		Standard [247]	Edit(Stack)> [388] Delete [389]
Left CTRL + G			Edit(Stack)> [388] Goto Row [389]
Left CTRL + CUE			Edit(Stack)> [388] Insert Row [389]
Left CTRL + CHAN			Edit(Stack)> [388] Delete Row [389]
Left CTRL + Left SHIFT + ENTER			Edit(Stack)> [388] Shift Col Up [389]
Left CTRL + ENTER			Edit(Stack)> [388] Shift Col Dn [390]
Left CTRL + M			View(Page Stack)> [427] Name [428]
Left CTRL + I			View(Page Stack)> [427] Index [428]
Left CTRL + T			View(Page Stack)> [427] Thumbnail [428]
Left CTRL + B			View(Page Stack)> [427] Blank Rows [428]
F1			Help> [434] Contents and Index [434]
Left SHIFT + F1			Help> [434] What's This [434]

6.7.6.3 Shortcuts for use when working with a page in the Graphic Edit window

This section lists the shortcut key combinations that perform selected actions available whilst editing pages using the Graphic Edit window [260].

Section	Description
General shortcuts [203]	General shortcut key combinations available when editing a page.
Working with graphic elements [203]	Shortcut key combinations available when working with graphic elements.
Working with markers [204]	Shortcut key combinations available when working with markers.
Working with pages [204]	Shortcut key combinations available when working with pages.
Working with text manipulation [205]	Shortcut key combinations available when manipulating text.
Working with text styling and text styles [207]	Shortcut key combinations available when styling text and applying user defined text styles.
Working with zoom [207]	Shortcut key combinations available when zooming within the Graphic Edit window.

6.7.6.3.1 General shortcuts

The table below lists general shortcut key combinations available when editing a page within the Graphic Edit window [260]. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbar	Related menu command or action
Left CTRL + N		Standard [247]	File> [378] New Job [379]
Left CTRL + O		Standard [247]	File> [378] Open Job [380]
Left CTRL + S		Standard [247]	File> [378] Save All [381]
Left CTRL + X		Standard [247]	Edit(Job)> [384] Edit>Cut [385]
Left CTRL + C		Standard [247]	Edit(Job)> [384] Edit>Copy [386]
Left CTRL + V		Standard [247]	Edit(Job)> [384] Edit>Paste [386]
Left ALT + DELETE		Standard [247]	Edit(Job)> [384] Delete [386]
Left SHIFT + ESC			Refreshes the display within the Graphic Edit window [260]. See Refresh tool [262] for more information.
F2 to F4			Action Local or User QuickLoad [175] location 1 to 3.
Left SHIFT + F2 to F4			Action Local or User QuickLoad [175] location 4 to 6.
F1			Help> [434] Contents and Index [434]
Left SHIFT + F1			Help> [434] What's This [434]

6.7.6.3.2 Working with graphic elements

The table below lists the shortcut key combinations available when working with graphic elements. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbar	Related menu command or action
Left CTRL + SPACE BAR			Moves through the list of graphic elements on the foreground layer of the current page.
Left CTRL Click on subsequent page elements			Select multiple page elements.

Key Combination	Tool	Toolbar	Related menu command or action
CTRL + Y		Standard |247|	Edit(Job)> |384|Redo |385|
CTRL + Z		Standard |247|	Edit(Job)> |384|Undo |385|

6.7.6.3.3 Working with markers

The table below lists the shortcut key combinations available when working with markers. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbox |315|	Related menu command	Line	Spline	Page
Left CTRL + M		Marker |318|	Text> |408|Markers>Edit |412|	■	■	■
Left CTRL + Left ALT + A		Marker |318|	Text> |408| Markers>Insert>Animation |411|	■	■	■
Left CTRL + Left ALT + M		Marker |318|	Text> |408|Markers>Insert>Motion |411|	■	■	■
Left CTRL + Left SHIFT + E		Marker |318|	Text> |408|Markers>Insert>End |411|	■	■	■
Left CTRL + Left SHIFT + F		Marker |318|	Text> |408|Markers>Insert>Field |411|			■
Left CTRL + Left SHIFT + L		Marker |318|	Text> |408|Markers>Lock Field |413|			■

6.7.6.3.4 Working with pages

The table below lists the shortcut key combinations available when working with pages. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbar	Related menu command or action
Numeric keypad number then Left CTRL + Left ALT + E			Closes the current page and opens the page corresponding to the number entered on the numeric keypad. Must enter a page number using the numeric keypad before pressing the shortcut combination. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser |251| or Page List |252| until they are edited. Also available using Page> |390|Goto |391|.
Numeric keypad number then Left CTRL + Left ALT + S			Saves the current page open in the Graphic Edit window |260| to the page corresponding to the number entered on the numeric keypad. Must enter a page number using the numeric keypad before pressing the shortcut combination. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser |251| or Page List |252| until they are edited.
Numeric keypad number then Left CTRL + Left ALT + Left SHIFT + S			In addition to saving the current page open in the Graphic Edit window |260| to the page corresponding to the number entered on the numeric keypad (see above), additionally clears all links to global fields on stored page, and then re-edits the original page.
Left CTRL + U			Saves the current changes in the Graphic Edit window |260| to the Page Browser (only valid if Update/Revert is selected in the Edit Mode group box |812| on the Edit dialog tab |810| on the User Preferences dialog box |809|).
Left CTRL + R			Reverts to the version of the page since it was last updated using Left CTRL + U, (only valid if Update/Revert is selected in the Edit Mode group box |812| on the Edit dialog tab |810| on the User Preferences dialog box |809|).

Key Combination	Tool	Toolbar	Related menu command or action
Left CTRL + G			Displays the Goto Page dialog box 666 where you can enter a page to go to. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser 251 or Page List 252 until they are edited.
Left CTRL + H			Displays the Copy From dialog box 605 where you can select to copy foreground graphic elements from a selected page.
Left CTRL + K			Displays a representation of the key within the Graphic Edit window 260 (mimics the operation of the Display Key check box on the Key and Grid Settings control tab 285 on the Graphics Tools 315.
Left CTRL + Left ALT + Left SHIFT + P			Begin freehand painting. You must be in the background layer of a page for this command to be selectable. The Paint Settings control tab 290 is displayed on the Graphic Tools 266, enabling configuration of the painting tools.

6.7.6.3.5 Working with text manipulation

The table below lists general shortcut key combinations available when manipulating text. New or edited shortcuts since the last release are highlighted with dark grey shading.

Action/Key Combination		Action	Line	Spline	Page
Arrow keys Home End PgUp PgDn		Move the text cursor within text.	■	■	■
Selection		Action	Line	Spline	Page
Left SHIFT +	LEFT and RIGHT Arrow keys	Select text by character.	■	■	■
	UP and DOWN Arrow keys	Select text up to the adjacent vertical text cursor position on the next line.			■
	Home and End	Select text up to the end or start of a line.	■	■	■
	PgUp and PgDn	Select text up to the end or start of a text page.			■
Left CTRL + Left SHIFT +	LEFT and RIGHT Arrow keys	Select text by word.	■	■	■
Movement		Action	Line	Spline	Page
Left CTRL + Left ALT	Arrow keys	Move selected text.	■		■
Left CTRL + Left ALT + Right SHIFT		Fast move selected text using a value in pixels, defined using the Fixed Text Increment With Right-Shift text box 810 on the Edit dialog tab 810 on the User Preferences dialog box 809.	■		■
Left CTRL + Left ALT + Left SHIFT		Move selected text using sub-pixel increments (slow/accurate).	■		■
Spacing		Action	Line	Spline	Page

Action/Key Combination		Action	Line	Spline	Page
Left CTRL + Left WINDOWS +	LEFT and RIGHT Arrow keys	Adjust character spacing to the left of the current text cursor position.	■		■
	UP and DOWN Arrow keys	Adjust line spacing above the line of text containing the text cursor.			■
Left CTRL + Left WINDOWS + Right SHIFT	LEFT and RIGHT Arrow keys	Fast adjust character spacing to the left of the current text cursor position using a value in pixels, defined using the Fixed Text Increment With Right-Shift text box [810] on the Edit dialog tab [810] on the User Preferences dialog box [809].	■		■
	UP and DOWN Arrow keys	Fast adjust line spacing above the line of text containing the text cursor using a value in pixels, defined using the Fixed Text Increment With Right-Shift text box [810] on the Edit dialog tab [810] on the User Preferences dialog box [809].			■
Left CTRL + Left WINDOWS + Left SHIFT	LEFT and RIGHT Arrow keys	Adjust character spacing to the left of the current text cursor using sub-pixel increments (slow/accurate).	■		■
	UP and DOWN Arrow keys	Adjust line spacing above the line of text containing the text cursor using sub-pixel increments (slow/accurate).			■
Expansion and Compression		Action	Line	Spline	Page
Left CTRL + Left WINDOWS + Left ALT	LEFT and RIGHT Arrow keys	Expand/compress character spacing of text to the right of the current text cursor position.	■		■
		Expand/compress character spacing of selected text.	■		■
	UP and DOWN Arrow keys	Expand/compress inter-line spacing of the line of text containing the text cursor and any subsequent lines.			■
		Expand/compress inter-line spacing of selected text.			■
Left CTRL + Left WINDOWS + Left ALT + Right SHIFT	LEFT and RIGHT Arrow keys	Fast expand/compress character spacing of selected text or text to the right of the current text cursor position using a value in pixels, defined using the Fixed Text Increment With Right-Shift text box [810] on the Edit dialog tab [810] on the User Preferences dialog box [809].	■		■
	UP and DOWN Arrow keys	Fast expand/compress inter-line spacing of selected text or the line of text containing the text cursor and any subsequent lines using a value in pixels, defined using the Fixed Text Increment With Right-Shift text box [810] on the Edit dialog tab [810] on the User Preferences dialog box [809].			■

Action/Key Combination		Action	Line	Spline	Page
Left CTRL + Left WINDOWS + Left ALT + Left SHIFT	LEFT and RIGHT Arrow keys	Expand/compress character spacing of selected text or text to the right of the current text cursor position using sub-pixel increments (slow/accurate).	■		■
	UP and DOWN Arrow keys	Expand/compress inter-line spacing of selected text or the line of text containing the text cursor and any subsequent lines using sub-pixel increments (slow/accurate).			■

6.7.6.3.6 Working with text styling and text styles

The table below lists the shortcut key combinations available when styling text and applying user defined text styles. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination		Action	Line	Spline	Page
Left CTRL + Q		*Only valid when the Style Copy box is cleared on the Text Page control set* [313]. Copy styling properties of selected text or the character at the current cursor position to the Graphic Tools [266].			■
Left CTRL + W		*Only valid when the Style Copy box is cleared on the Text Page control set* [313]. Apply styling properties currently set in the Graphic Tools [266] to selected text.			■
Left CTRL + Left ALT + J		Turn on Style Copy (equivalent to checking the Style Copy box on the Text Page control set [313] on the Graphic Tools [266].			■
Left CTRL + Left ALT + K		Turn off Style Copy (equivalent to checking the Style Copy box on the Text Page control set [313] on the Graphic Tools [266].			■
Left CTRL + Left SHIFT + A to Z		*Does not apply to Version 2 RapidAction keyboards (Blue)* Apply a user defined style stored within the User Defined Styles control tab [298] to selected text or a text element.			■

6.7.6.3.7 Working with zoom

The table below lists general shortcut key combinations available when zooming within the Graphic Edit window. New or edited shortcuts since the last release are highlighted with dark grey shading.

Key Combination	Tool	Toolbox [315]	Related menu command or action
Left CTRL + 0	[icon]	Zoom [321]	View(Job)> [421] Zero Origin [425]
Left CTRL + =	[icon]	Zoom [321]	View(Job)> [421] Zoom In [425]
Left CTRL + -	[icon]	Zoom [321]	View(Job)> [421] Zoom Out [425]
Left CTRL + 8		Zoom [321]	View(Job)>Zoom> [421] 25% [425]
Left CTRL + 7	[icon]	Zoom [321]	View(Job)>Zoom> [421] 50% [425]

Key Combination	Tool	Toolbox [315]	Related menu command or action
Left CTRL + 1	[1x]	Zoom [321]	View(Job)>Zoom> [421] 100% [425]
Left CTRL + 2	[2x]	Zoom [321]	View(Job)>Zoom> [421] 200% [425]
Left CTRL + 3	[4x]	Zoom [321]	View(Job)>Zoom> [421] 400% [426]
Left CTRL + 4	[8x]	Zoom [321]	View(Job)>Zoom> [421] 800% [426]
Left CTRL + 5		Zoom [321]	View(Job)>Zoom> [421] 1600% [426]
Left CTRL + 6		Zoom [321]	View(Job)>Zoom> [421] 3200% [426]

6.7.6.4   Shortcuts for use whilst working Online

This section lists the shortcut key combinations that perform selected actions available whilst working Online. These apply to both Clarity hardware playout and Clarity PREP software playout. Most of these shortcuts are replicated using the tools on the Playout Controls control box [343].

Key Combination	Tool	Toolbar	Action
Numeric keypad number then numeric keypad +			Puts the system online and then prepares the page corresponding to the number entered on the numeric keypad.
Left CTRL + numeric keypad +			Whilst online, prepares the page currently open in the Graphic Edit window [260] (the Graphic Edit window must have focus).
Numeric keypad number then numeric keypad ENTER			Puts the system online and then takes the page corresponding to the number entered on the numeric keypad.
Left CTRL + numeric keypad ENTER			Whilst online, takes the page currently open in the Graphic Edit window [260] (the Graphic Edit window must have focus).
Numeric keypad ENTER			Whilst online, takes the currently prepared page.
Left CTRL + INSERT			Whilst online, increase speed of foreground rolls, crawls, animation or cel animations.
Left CTRL + DELETE			Whilst online, decrease speed of foreground rolls, crawls, animation or cel animations.
Left CTRL + HOME			Whilst online, pauses foreground rolls, crawls, animation or cel animations
Left CTRL + END			Whilst online, stops playout.
Left CTRL + PgUp			Whilst online, prepares the previous page.
Left CTRL + PgDn			Whilst online, prepares the next page.

6.7.7   Resetting a keyboard

In certain circumstances, a connected keyboard may require resetting if it exhibits strange behaviour during use. This may occur in conjunction with the use of keyboard extenders [209].

The Keyboard Active/Reset Keyboard tool on the Standard toolbar [247] illuminates when the connected keyboard is active i.e. keys are being pressed. This is correct behaviour during normal operation.

If the Keyboard Active/Reset Keyboard tool remains illuminated, even when no keys are being depressed on the keyboard, then the application and keyboard are no longer in sync with each other. Select the Keyboard Active/Reset Keyboard tool or select File> [378] Reset>Keyboard [384] to reset the application and keyboard, thus enabling them to re-synchronise.

SEE ALSO

6.7.8 Keyboard/Video/Mouse (KVM) extenders and switches

Where the distance between a Clarity system unit and its associated keyboard, mouse and monitor are greater than recommended, an extension will be required in order to guarantee the correct operation of the system. We have extensively tested a number of third party KVM extenders and switches. See the following sections:

Hardware	Description	See
KVM Extender	KVM extenders enable Clarity users to control their system unit from up to 200 meters away. Perfect for isolated system unit location or redundant systems where the system may be inaccessible to the user.	Supported KVM Extenders [209]

6.7.8.1 Supported KVM extenders

Pixel Power does not in any way warrant the performance and reliability of peripheral (RapidAction keyboard, mouse etc.) operation using the listed KVM extenders and as such are NOT responsible for problems relating to erroneous peripheral operation due to excessive CAT5/5e/6 cable length, electronic interference etc. that may be present within your installation.

The following KVM extenders have been tested in conjunction with the CG Tools software and factory supplied RapidAction keyboards and mice. The testing procedure ensures that Version 1 and Version 2 RapidAction keyboards perform the same functions reliably via connected KVM extenders in the same was as if they were connected directly to a Clarity system units' PS/2 port. Testing is completed using a relatively short CAT5 cable length (<5m). It is important to note that all supported KVM extenders **BLOCK** keyboard programming commands. This means that the keyboard must be plugged directly into the Clarity system unit or PC running the Clarity PREP or Clarity Plugin software in order for this operation to be successful.

OEM	Part No. and model name	Description and product URL	Image	CG Tools test versions	Supported by RapidAction Keyboard	
					Version 1 [179]	Version 2 [183]
Lindy	32390 Extender Junior XL+XR *Remote and Local unit*	http://www.lindy.com/uk/productfolder/03/32/32390/index.php Enables a PS/2 RapidAction keyboard/mouse, SVGA monitor and high-speed serial RS232 device, such as a touch screen, to be connected to a Clarity system unit using low cost CAT5/5e/6 cable.		7.1.0.3	YES	YES
Lindy	32391 Extender Junior XR *Remote unit only*	http://www.lindy.com/uk/productfolder/03/32/32391/index.php Designed to connect a RapidAction keyboard, monitor and mouse to a Lindy KVM switch. The remote unit enables remote operation of multiple Clarity system units using low cost CAT5/5e/6 cable.		7.1.0.3	YES	YES

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

OEM	Part No. and model name	Description and product URL	Image	CG Tools test versions	Supported by RapidAction Keyboard	
					Version 1 [179]	Version 2 [183]
Lindy	39390 Extender C5 Junior *Remote and Local unit*	http://www.lindy.com/uk/productfolder/03/39/39390/index.php				
		Enables a PS/2 RapidAction keyboard/mouse and SVGA monitor to be connected to a Clarity system unit using low cost CAT5/5e/6 cable.		7.1.0.3	YES	YES
Lindy	32395 Extender Plus *Remote and Local unit*	http://www.lindy.com/uk/productfolder/03/32/32395/index.php				
		Enables a PS/2 RapidAction keyboard/mouse, SVGA monitor and high-speed serial RS232 device, such as a touch screen, to be connected to a Clarity system unit using low cost CAT5/5e/6 cable. The local Clarity system unit can also be controlled locally, and an additional PC/system unit can also be connected and controlled at the remote end.		7.1.0.3	YES	YES

The CG Tools software from version 7.1.0.3 onward offers additional options that can be used to explicitly specify how a keyboard is connected to a system unit with regards to it's operation (in particular LED configuration and operation on Version 2 RapidAction keyboards [183]). See New Features> [74] 7.1.0.3 [74] and Keyboard Type and specific keyboard options [720] on the Keyboard dialog tab [718] on the Local Preferences dialog box [696].

SEE ALSO

www.lindy.com
Lindy KVM extender usage guidelines [210]

6.7.8.2   Lindy KVM extender and switch usage guidelines

The following points should be noted in order to ensure that the devices work correctly.

1.   Where the CPU switch is used with the extender, the hot keys on the extender box need to be turned off to facilitate the hotkey switching of channels on the CPU switch. See the Lindy documentation for details of this configuration.
2.   The extender box has the ability to adjust the amount of video compensation. It is essential that this is set up during installation in order to guarantee the best possible VGA video output quality. Note that if the extender is being used with the CPU switch then the hot keys on the extender will need to be turned on temporarily to facilitate the adjustment. See the Lindy documentation for details of this adjustment.
3.   Where a tablet is being used with a Clarity system unit, the RS232 controlling signal can also be routed using the extender combination. However, please note that the CPU switch does not have the capability of working with this RS232 signal.

NOTE

Note that all of the KVM extenders we have tried with RapidAction keyboards block the keyboard programming commands. This means that the keyboard must be plugged directly into the Clarity system unit or PC running the Clarity PREP or Clarity Plugin software in order for this operation to be successful.

6.8   Keypads

You may have optionally purchased one of the following keypads:

Keyboard	Description	Picture
Version 1 RapidRecall keypad	Previous generation RapidRecall keypad.	
Version 2 RapidRecall keypad [211]	Version 2 RapidRecall keypad (PP8257 [30]) is optimized for master control and live applications where space is at a premium.	

SEE ALSO

RapidRecall keypad [30]
Optional licensed features and other product options available for one or more products or derivatives [13]

6.8.1   Version 2 RapidRecall keypad (current)

The Version 2 RapidRecall keypad (PP1111 [30]) is optimized for master control and live applications where space is at a premium. The keypad gives quick recall of stills, clips and character generator pages from within a prepared job. The 4 line fluorescent display gives operator confidence in what is prepared for air. The keypad is currently offered in a single layout [214] targeting the character generation/playout application.
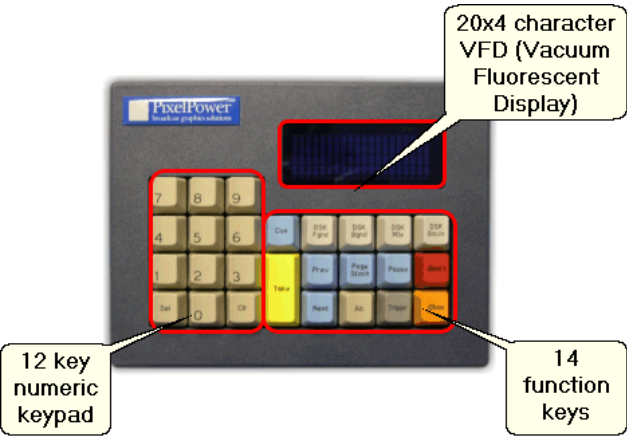
SEE ALSO

Package contents [212]
Required host system software versions [212]
Specification [213]
Terms and definitions [214]
Important information and tasks [215]
Limitations [216]
Example A: Installation of Version 2 RapidRecall keypad for use over ethernet networks using static IP address [216]

211   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.8.1.1 Package contents

The package should contain the following items listed below. If any items are missing, please contact your distributor or Pixel Power Technical Support immediately.

Quantity	Item	
1	Version 2 RapidRecall keypad with selected keycap configuration. See Keypad layouts 214 for more information.	
1	Power supply complete with appropriate plug adaptor for country of use and 9-pin female D-type power cable.	
Optional (1)	You may also receive an updated copy of the `RapidRecallKeypad.exe` application on CD-ROM. See Required host system software versions 212 for more information.	

6.8.1.2 Required host system software versions

The table below lists the software versions that need to be installed on the selected host Clarity system unit in order for the Version 2 RapidRecall keypad to function correctly via ethernet connectivity.

Software	Version
CG Tools	4.4.0.1 or later.
RapidRecall Keypad Server (RapidRecallKeypad.exe) 1025	3.0.0.0 or later.

The `RapidRecallKeypad.exe` application is installed as part of the CG Tools software installation. To check the version installed on the selected host Clarity system unit, follow the steps below:

1. Navigate to the following location using normal Windows methods:

   `C:\Program Files\Pixel Power Ltd\Bin`

   Note that this is the default installation location and this may be different to the CG Tools installation on the selected host Clarity system unit.

2. Right-click on the `RapidRecallKeypad.exe` file and select properties from the shortcut menu that appears. The Properties dialog box is displayed.

3. The File Version parameter should display a version later than 3.0.0.0.

If this is not the case, then you will have to copy a new version from the supplied CD-ROM into the `C:\Program Files\Pixel Power Ltd\Bin` folder. If you are not in possession of the required version, please contact Pixel Power Technical Support [103].

6.8.1.3 Specification

The table below lists the main specification points for the Version 2 RapidRecall keypad.

Item	Description
Construction	Compact ABS plastic enclosure
Keys	26 full travel PC keyboard style keys
Width	196mm
Height	49mm
Depth	147mm
Weight	0.6kg
Operating Temperature	-10 to +50 °C
Power	9-32v DC
Display	20x4 character VFD (Vacuum Fluorescent Display)

6.8.1.3.1 Rear panel layout and connectors

The following rear panel is available with the Version 2 RapidRecall keypad:
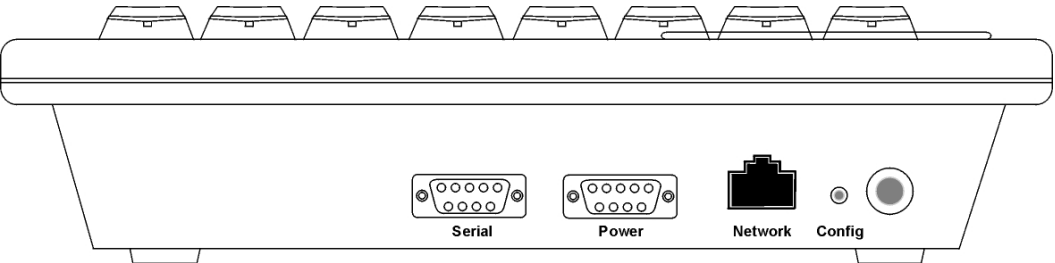
The following connectors are available on the rear panel:

Item	Description
Serial	9-pin D-type male RS232 serial port
Network	Ethernet 10/100 RJ45 connector
Config	Boot IP address configuration
Power	9-pin D-type male RS232 serial port

6.8.1.3.2   Keypad layout

The following keypad layout is available with the Version 2 RapidRecall keypad:

Layout	Illustration
Playout Control *Fulfils the specific requirement for playout control of output from Clarity systems.*	

6.8.1.4   Terms and definitions

The table below lists terms and definitions used in this example.

Term	Definition
Keypad	Standalone version 2 RapidRecall keypad with the Playout Control key set 214.
Host Clarity system unit	Clarity system unit to be controlled by the standalone keypad.
RapidRecall Server application	Software that communicates between the CG Tools software and the keypad (`RapidRecallKeypad.exe`).

6.8.1.5   Requirements

6.8.1.5.1   Example A: Dynamic IP address allocation

This example requires the following:

- Ethernet network;
- Version 2 RapidRecall keypad in the Playout Control configuration with power supply, power lead and connection via RJ45 cable to the ethernet network;
- DHCP (Dynamic Host Configuration Protocol) server (server running Microsoft® Windows® Server 2003 documented in this procedure);
- Host Clarity system unit is installed with Microsoft® Windows® XP Service Pack 2, CG Tools software (Clarity software) and RapidRecall Keypad Server application (see Required host system software versions 212 for more information). *Although this example details the use of Microsoft® Windows® XP on the host Clarity system unit, Microsoft® Windows® 2000 is also supported but some steps in this example may not apply/differ due to differences in the operating system used.*

NOTE

It not a requirement for the DHCP server to be running a Microsoft® Windows® operating system (e.g. a DHCP server can run Linux or UNIX etc.) and the DHCP standard is not linked to Microsoft in anyway.

6.8.1.5.2 Example B: Static IP address

This example requires the following:

- Ethernet network;
- Version 2 RapidRecall keypad in the Playout Control configuration with power supply, power lead and connection via RJ45 cable to the ethernet network;
- PC running a terminal application (Hyperterminal) to configure the static IP address;
- Null modem cable (pins 2 and 3 crossed over, pin 5 connected through to pin 5) to connect the PC running the terminal application to the keypad, thus enabling the configuration of a static IP address;

	Keypad (9-pin D-type female)	PC (9-pin D-type female)
Rx/Tx	2	3
Rx/Tx	3	2
Gnd	5	5

- Host Clarity system unit is installed with Microsoft® Windows® XP Service Pack 2, CG Tools software (Clarity software) and RapidRecall Keypad Server application (see Required host system software versions [212] for more information). *Although this example details the use of Microsoft® Windows® XP on the host Clarity system unit, Microsoft® Windows® 2000 is also supported but some steps in this example may not apply/differ due to differences in the operating system used.*

6.8.1.6 Important information and tasks

Please note the following important information:

- It is assumed that the person performing the installation has reasonable knowledge of networking protocols and infrastructure.
- When working on the host Clarity system unit, you must be logged in as a user with administrator privileges to configure DCOM and firewall settings.
- The CG Tools software derivative on the host Clarity system (e.g. Clarity) must run as a full version (i.e. the system unit has access to a licence dongle and related licence) and does not run as a demo version.
- Running of the CG Tools software derivative on the host Clarity system (e.g. Clarity) must not be impeded by user information messages that delay the starting/continuation of the software (e.g. YUV/DirectX operation messages).

Also complete the following tasks before continuing:

Record Version 2 RapidRecall keypad MAC address [216]
Ensure power supply is correctly configured [216]

6.8.1.6.1   Record Version 2 RapidRecall keypad MAC address

If you are installing a keypad that will have an IP address dynamically assigned using a DCHP server, its vitally important that you make a note of the MAC (Machine Address Code) listed on the label on the bottom of the keypad. This MAC address will be associated with a reserved IP address listed by the DHCP server present on your network.

Serial	Power	MAC Address
		00:50:C2:2E:10:58

6.8.1.6.2   Ensure power supply is correctly configured

Before connecting the Version 2 RapidRecall keypad to the power supply, you must first check that the power supply is correctly configured:

1. If not fitted already, connect the supplied plug adaptor for the native country of use. Release the standard two pin adapter using the Open switch (A), remove the two pin adapter (B), then click the supplied plug adaptor into place (C).

A   **B**   **C**
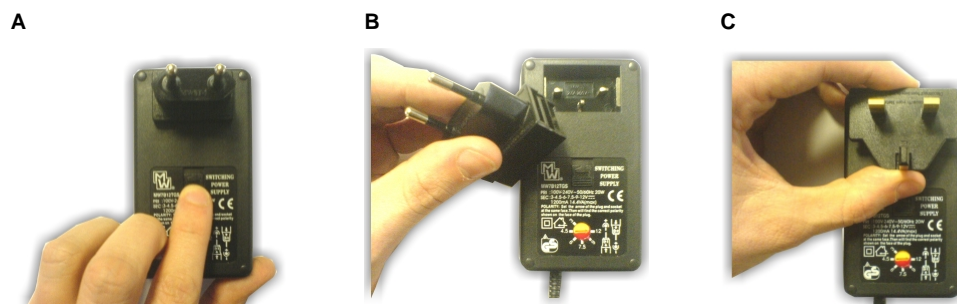
2. Check that the voltage polarity dial is set to 12 (volts).

6.8.1.7   Limitations

The following limitations apply when using the keypad over an ethernet network:

*   The keypad can only be connected to both a single instance of the RapidRecall Server application and CG Tools software derivative on a playout system unit at any one time.

6.8.1.8   Example A: Installation of Version 2 RapidRecall keypad for use over ethernet networks using static IP address

The Version 2 RapidRecall keypad is primarily designed to control Clarity system unit playout over an ethernet network connection. This section details an example keypad installation to work over an ethernet network connection with a static IP address dynamically assigned using a PC running a terminal application.

Complete the following tasks before continuing:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   216

Copyright © 2000-2006 Pixel Power Ltd.

Ensure power supply is correctly configured 216

Please read the following sections:

Section	Description
Description of example installation 218	Describes the most simple implementation that utilises a static IP address assigned to the keypad using a PC running a terminal application (Hyperterminal).
Graphical representation of system components 219	Graphical representation of system components and how they are connected.
Attach Version 2 RapidRecall Keypad to PC configuring static IP address (1) 220	Attach the keypad to the PC running the terminal application (Hyperterminal).
Start terminal application (Hyperterminal) on PC and open a communication port (2) 220	With the null modem cable connected, you can start the terminal application, configure communication parameters and open a communication port.
Attach Version 2 RapidRecall Keypad to Ethernet network and power source (3) 221	With the power supply correctly configured (Ensure power supply is correctly configured 216), you can now attach the keypad to the Ethernet network and power supply.
Power up Version 2 RapidRecall keypad and depress Config button (4) 221	With the keypad connected to the Ethernet network and power supply, you can now power up the keypad and press the Config button on the keypad rear panel.
Configure RapidRecall keypad firmware (5) 222	After powering up the keypad and pressing the Config button on the rear panel, you can configure the keypads' firmware; disabling the request of an IP address from a DCHP server and then configuring a static IP address.
Disconnect Version 2 RapidRecall keypad from configuring PC and check IP address allocation (6) 223	Now that you have disabled the request of an IP address from a DCHP server and configured a static IP address, you can check that this static IP address is used during power up.
Login into Microsoft® Windows® on host Clarity system unit with administrator rights (7) 223	To enable correct configuration of DCOM settings.
Configure DCOM settings on host Clarity system (8) 224	It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.
Open the keypad communication port through the Windows firewall on the host Clarity system (9) 224	For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on the host Clarity system.
Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (10) 226	With the RapidRecall keypad running, the correct IP address allocated and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Server application.
Start the RapidRecall Keypad Server on host Clarity system unit (11) 227	After configuring the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.

6.8.1.8.1 Description of example installation

This example is perhaps the most simple implementation that utilises a static IP address assigned to the keypad using a PC running a terminal application (Hyperterminal).

a) The host Clarity system (`KeypadHost`) is installed with a copy of the CG Tools software. Version 7.1 is used in this example. A copy of the RapidRecall Server application is also installed on the host Clarity system. Version 3.0.0.0 is used in this example. See Required host system software versions [212] for more information.

   It is important to note that the RapidRecall Server application does not have to be installed on the same system but does simplify installation.

b) To enable communication, DCOM settings are configured for the CG Tools software (Clarity.exe) on the host Clarity system. The keypad communication port (10255) is also opened on the Windows firewall on the host Clarity system.

   It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on any additional firewalls present within the ethernet network infrastructure.

c) A static IP address (`192.168.080.181` in this example) is assigned to the keypad using a PC running a terminal application (Hyperterminal).

6.8.1.8.2   Graphical representation of system components

Standalone RapidRecall keypad

Version 2 RapidRecall keypad

Rear Panel

DCOM over TCP/IP

Ethernet Switch/Router

DCOM over TCP/IP

ETHERNET

Serial

9-pin female D-type

Serial

Standalone PC running Hyperterminal

The Version 2 RapidRecall Keypad has a static IP address configured by a terminal application running on a standalone PC connected using a null modem cable.

9-pin female D-type

-12V DC

RapidRecall keypad power

Mains power supply

Country specific adapter (supplied)

Power supply

Clarity system unit running the RapidRecall Keypad Sever and a copy of the CG Tools software. This is the system to be controlled by the RapidRecall keypad.

Clarity system unit

Host Clarity system to be controlled by RapidRecall keypad

DCOM

CG Tools software (Clarity.exe)

COM

RapidRecall Keypad Server (RapidRecallKeypad.exe)

6.8.1.8.3   Attach Version 2 RapidRecall Keypad to PC configuring static IP address (1)

You can now attach the keypad to the PC running the terminal application (Hyperterminal).

1.   Plug one end of the user supplied <u>9-pin D-type null modem cable</u> [215] into the Serial male 9-pin D-type connector on the keypad rear panel.
2.   Plug the other end of the 9-pin D-type null modem cable into an available serial port (male 9-pin D-type) on the PC.

6.8.1.8.4   Start terminal application (Hyperterminal) on PC and open a communication port (2)

With the null modem cable connected, you can now start the terminal application, configure communication parameters and open a co

1.   Start the terminal application on the PC. For this example we are using Hyperterminal (Start>All Programs \Accessories\Communications>Hyperterminal). The Hyperterminal application window appears with the Connection Description dialog box displayed. If you are starting Hyperterminal for the first time, some configuration needs to be completed (local area code specification etc.) before the Connection Description dialog box is displayed:

2.   Enter a name for the connection (for this example, enter `KeypadConfig`), then select OK. The Connect To dialog box is displayed.

3.   Ensure that the correct COM port is selected from the Connect using drop-down list box, then select OK. The <com port> Properties dialog box is displayed.
4.   Configure the port settings using the following settings:

Item	Description
Bits per second	9600
Data bits	8
Parity	None
Stop bits	1
Flow control	None

5.   Select OK to accept the port settings and open a connection on the selected port.

6.8.1.8.5   Attach Version 2 RapidRecall Keypad to Ethernet network and power source (3)

With the power supply correctly configured (Ensure power supply is correctly configured) [216], you can now attach the keypad to the ethernet network and power source.

1. Plug one end of the user supplied ethernet cable into the RJ45 connector on the keypad rear panel.
2. Plug the other end of the RJ45 cable to an available port on your ethernet switch/router.
3. Plug the 9-pin female D-type connector on the supplied power cable into the Power 9-pin male D-type connector on the keypad rear panel.
4. Make sure that your county specific adaptor plug is connected securely and the voltage dial set [216]. Connect the power supply to the mains (100V-240V~50/60Hz) but ensure that the mains supply is OFF.

If is not possible to switch off the mains supply, then do not connect the power supply at this stage.

Continue to Power up Version 2 RapidRecall keypad and depress Config button [221].

6.8.1.8.6   Power up Version 2 RapidRecall keypad and depress Config button (4)

With the keypad connected to the Ethernet network and power supply, you can now power up the keypad and press the Config button on the keypad rear panel.

1. If the power supply is connected to a switched mains outlet, switch on the outlet. If the outlet is not switched and you have not yet plugged in the supplied power supply, do so now. The red LED on the power supply should illuminate.
2. The keypad display should illuminate and short beep is heard. The following message is shown on the keypad display:

```
      Pixel Power
 Rapid Recall Keypad
```
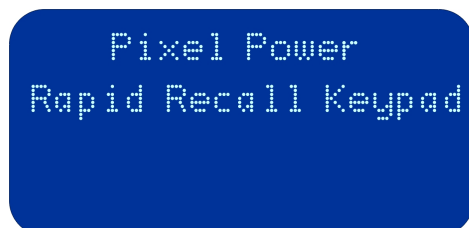
3. Within four seconds of applying power, press the Config button on the rear panel [213] using a small blunt implement (e.g. pen).
4. On the PC hosting the Hyperterminal connection, press ENTER a few times in the Hyperterminal session. You should see the following prompt appear:

   >>

Continue to Configure RapidRecall keypad firmware [222].

NOTE

The following message is displayed in conjunction with a repetitive alarm approximately 15 seconds after the default boot message is displayed:

```
UNABLE TO CONTACT
DHCP SERVER
```

This message is displayed in because the keypad firmware is configured by default to obtain an address from a DHCP server. Please ignore this message.

221   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.8.1.8.7   Configure RapidRecall keypad firmware (5)

After powering up the keypad and pressing the Config button on the rear panel, you can configure the keypads' firmware by disabling the request of an IP address from a DCHP server and then configuring a static IP address.

1. Type:

    l (that's lowercase L)

    then press ENTER. You should see the current keypad firmware configuration, as shown below:

    ```
          *** SYSTEM CONFIG(V1.0) ***
     Firmware EIT1000A V2 Build 011
     MAC ADDRESS: 00:50:C2:2E:10:58

      1.   SYSTEM_IP      : 255.255.255.255
      2.   SUBNET_MASK    : 255.255.000.000
      3.   GATEWAY        : 000.000.000.000
      4.   DHCP           : ENABLE
      5.   TERMINAL PORT  : 10255
      6.   COM1 BAUD      : 9600
      7.   COM1 DATABITS  : 8
      8.   COM1 PARITY    : NONE
      9.   COM1 HANDSHAKE : NONE
     10.   COM1 POWER     : DISABLE
     11.   COM1 PORT      : 5557
     12.   COM2 BAUD      : 9600
     13.   COM2 DATABITS  : 8
     14.   COM2 PARITY    : NONE
     15.   COM2 HANDSHAKE : NONE
     16.   COM2 POWER     : DISABLE
     17.   COM2 PORT      : 5558
     18.   KEYBOARD_MODE  : KEYCODE
     19.   CONFIG_LOGIN   : config
     20.   NET NAME       :
     21.   BANNER LINE 1  :      Pixel Power
     22.   BANNER LINE 2  :  Rapid Recall Keypad
     23.   BANNER LINE 3  :
     24.   BANNER LINE 4  :
    ```

2. To disable DHCP on the keypad, type the following:

    s 4 DISABLE

    then press ENTER, then type:

    l (that's lowercase L)

    then press ENTER.

3. You should now see that DHCP is disabled, as shown by the revised entry in the firmware configuration:

    ```
      4.   DHCP           : DISABLE
    ```

4. To define a new static IP address, type the following (where xxx.xxx.xxx.xxx is the static IP address that you wish to assign to the keypad; for this example we have specified 192.168.080.181):

    s 1 xxx.xxx.xxx.xxx

    then press ENTER, then type:

    l (that's lowercase L)

5. You should now see that the IP address has changed to the one you have specified, as shown by the revised entry in the firmware configuration:

    ```
      1.   SYSTEM_IP      : 192.168.080.181
    ```

Now when you re-apply power to the keypad it will start up with the new IP address.

Continue to

6. Getting started

6.8.1.8.8 Disconnect Version 2 RapidRecall keypad from configuring PC and check IP address allocation (6)

Now that you have disabled the request of an IP address from a DCHP server and configured a static IP address, you can check that this static IP address is used during power up.

1. Disconnect the 9-pin D-type null modem cable from the Serial male 9-pin D-type connector on the keypad rear panel.
2. Switch off the mains power supply or disconnect the supplied power cable into the Power 9-pin male D-type connector on the keypad rear panel. The red LED on the power supply should extinguish.
3. Switch on the mains power supply or re-connect the supplied power cable into the Power 9-pin male D-type connector on the keypad rear panel.
4. The keypad display should illuminate and short beep is heard. The following message is shown on the keypad display:

```
        Pixel Power
   Rapid Recall Keypad
```
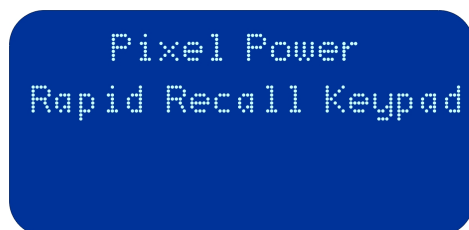
5. If all is well, the message will remain. To check the static IP address assigned in the previous section, press the Config button on the rear panel [213] using a small blunt implement (e.g. pen). The allocated IP address is displayed whilst the button is pressed:

```
      192.168.080.181
```
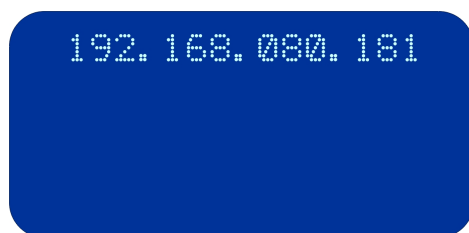
Continue to Login into Microsoft® Windows® on host Clarity system unit with administrator rights [233].

6.8.1.8.9 Login into Microsoft® Windows® on host Clarity system unit with administrator rights (7)

Follow the steps below:

1. Start the host Clarity system unit in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges (e.g. Administrator).

Continue to Configure DCOM settings on host Clarity system [224].

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

6.8.1.8.10   Configure DCOM settings on host Clarity system (8)

In this example, information between the CG Tools software and the RapidRecall Keypad Server application is communicated using COM due to both software applications being installed on the same system. If the RapidRecall Keypad Server application is installed on a machine other than the Clarity host, then DCOM is used.

It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.

For this example, only DCOM settings for the Clarity executable on the host Clarity system have to be configured. You must be logged in as a user with administrator privileges to configure DCOM and firewall settings.

To enable DCOM access for the Clarity executable on the host Clarity system, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for the CG Tools software application on HOST systems [1068]

If the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then DCOM settings for this application will also have to be configured. To enable DCOM access for the RapidRecall Keypad Server (RapidRecallKeypad.exe) executable, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for software applications on REMOTE systems [1062]

After configuring the required settings, continue to Open the keypad communication port through the Windows firewall on the host Clarity system [224].

6.8.1.8.11   Open the keypad communication port through the Windows firewall on the host Clarity system (9)

For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on the host Clarity system. This enables un-impeded communication between the RapidRecall Keypad Server application and the selected CG Tools software derivative (Clarity.exe).

It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on that machine AND additional firewalls present within the ethernet network infrastructure.

Follow the steps below:

6. Getting started
Keypads

1. Select Start>Control Panel. The Control Panel is displayed (category view shown below; differs to optional classic).

2. Select Security Centre. The Security Centre is displayed.

3. Select Windows Firewall. The Windows Firewall dialog box is displayed.

4. Ensure that the On box is checked.
5. Select the Exceptions dialog tab.
6. Select Add Port. The Add a Port dialog box is displayed.
7. To enable incoming and outgoing communication on port 10255, enter RapidRecall Keypad in the Name text box and 10255 in the Port Number box.

8. Select OK to close the Add a Port dialog box. This will add a new TCP/IP port 10255 under the name RapidRecall Keypad.
9. Select OK to close the Windows Firewall dialog box.

Continue to Configure command line switches for RapidRecall Keypad Playout Control Server shortcut 226.

6.8.1.8.12 Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (10)

With the RapidRecall keypad running, the correct IP address allocated and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Server application. The RapidRecall Keypad Sever application communicates between a defined RapidRecall keypad and a Clarity system unit being used for playout. The application has the facility to connect to keypads that are connected both via an ethernet network and via a serial port on the local host system.

The program shortcut can feature various command line switches that configure how the application is started.

By default, the RapidRecall Keypad Playout Control Server shortcut is placed in the following program group:

`C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd.`

Note that this is the default installation location and this may be different to the CG Tools installation on your system.

To edit the shortcut:

1. Select Start>All Programs>Pixel Power Ltd.

2. Right-click on the RapidRecall Keypad Playout Control Server shortcut and select Properties from the shortcut menu. The RapidRecall Keypad Playout Control Server properties box is displayed.

3. Edit the shortcut in the Target text box.

Below is the shortcut target used in this example:

```
"C:\Program Files\Pixel Power Ltd\Bin\RapidRecallKeypad.exe" –TYPE NETWORK –IPADDRESS
192.168.080.181 –CLARITY localhost –AUTOCONNECT
```

This shortcut configures the RapidRecall Keypad Sever application to connect automatically to the RapidRecall keypad on the ethernet network with the IP address `192.168.80.181` and connect to a copy of the CG Tools software on the host Clarity system unit (`localhost`). For more information on the full complement of available switches and their parameters, see <u>RapidRecall Keypad Server shortcut command line switches</u> 1027.

Continue to <u>Start the RapidRecall Keypad Server on host Clarity system unit</u> 227.

6.8.1.8.13 Start the RapidRecall Keypad Server on host Clarity system unit (11)

Now that you have configured the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.

1. Select Start>All Programs>Pixel Power Ltd>RapidRecall Keypad Playout Server. The RapidRecall Keypad Server application is started.

   a) The first thing that occurs is that the RapidRecall Keypad Server application checks what mode to start in. This corresponds to the `–TYPE` switch defined in the shortcut (in this case `NETWORK`). This setting configures the application to use the GUI related to network operation.

   b) The RapidRecall Keypad Server application then checks the Clarity system unit on which to start the CG Tools software derivative. This corresponds to the `–CLARITY` switch defined in the shortcut (in this case `localhost`).

   c) The installed CG Tools software derivative (in this case Clarity) is then started using a COM/DCOM connection.

   d) The RapidRecall Keypad Server application then tries to connect automatically to the defined RapidRecall keypad. This corresponds to the `–IPADDRESS` switch defined in the shortcut (in this case `192.168.080.181`) and the `–AUTOCONNECT` switch.

2. After the above has been completed successfully, the RapidRecall Keypad Server application starts in the network GUI configuration. Whilst the RapidRecall Keypad Server application is starting, the <u>System Tray icon</u> 1028 (default Pixel Power icon) is yellow. Once it has started successfully, the icon is blue. If the application does not appear automatically, right-click on the icon in the System Tray and select Restore from the <u>shortcut menu</u> 1028.

Some parts of user interface are greyed out due to the keypad already being connected. The setting selected in the Display Mode group will affect what is displayed on the keypad display after connection [241]. The setting selected in the Selected Channel group box is indicated by an asterisk next to the channel label on the keypad display. For more information on the RapidRecall Keypad Server GUI, see Description of the RapidRecall Keypad Server GUI [1026].

6.8.1.9 Example B: Installation of Version 2 RapidRecall keypad for use over ethernet networks using dynamic IP address allocation

The Version 2 RapidRecall keypad is primarily designed to control Clarity system unit playout over an ethernet network connection. This section details an example keypad installation to work over an ethernet network connection with an IP address dynamically assigned using a DHCP sever.

Complete the following tasks before continuing:

Record Version 2 RapidRecall keypad MAC address [216]
Ensure power supply is correctly configured [216]

Please read the following sections:

Section	Description
Description of example installation [229]	Describes the most simple implementation that utilises ethernet network communication.
Graphical representation of system components [230]	Graphical representation of system components and how they are connected.
Attach Version 2 Rapid Recall Keypad to Ethernet network and power source (1) [231]	With the power supply correctly configured, you can now attach the keypad to the ethernet network and power source.
Reserve IP address on DHCP server (2) [231]	Once you have connected the Version 2 Rapid Recall keypad to the ethernet network and power supply, you can configure the DHCP server to reserve an IP address that corresponds to the MAC address of the keypad.
Power up Version 2 RapidRecall keypad and check IP address allocation (3) [232]	With the keypad connected to the ethernet network and power supply, you can now power up the keypad and check that the reserved IP address has been allocated by the DHCP server.
Login into Microsoft® Windows® on host Clarity system unit with administrator rights (4) [233]	To enable correct configuration of DCOM settings.
Configure DCOM settings on host Clarity system (5) [233]	It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.
Open the keypad communication port through the Windows firewall on the host Clarity system (6) [234]	For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on the host Clarity system.

Section	Description
Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (7) [236]	With the RapidRecall keypad running, the correct IP address allocated by the DHCP server and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Sever application.
Start the RapidRecall Keypad Server on host Clarity system unit (8) [237]	After configuring the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.

6.8.1.9.1   Description of example installation

This example is a more advanced implementation that utilises ethernet network communication and a DHCP server to assign a dynamic IP address to the keypad.

a)   The host Clarity system (`KeypadHost`) is installed with a copy of the CG Tools software. Version 7.1 is used in this example. A copy of the RapidRecall Server application is also installed on the host Clarity system. Version 3.0.0.0 is used in this example. See Required host system software versions [212] for more information.

It is important to note that the RapidRecall Server application does not have to be installed on the same system but does simplify installation.

b)   To enable communication, DCOM settings are configured for the CG Tools software (Clarity.exe) on the host Clarity system. The keypad communication port (10255) is also opened on the Windows firewall on the host Clarity system.

It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on any additional firewalls present within the ethernet network infrastructure.

c)   An IP address (`192.168.080.181` in this example) is reserved on the DHCP server on the same ethernet network. The standalone keypad is connected to the ethernet network and receives the reserved IP address from the DHCP server on the same ethernet network when the keypad is turned on.

6.8.1.9.2   Graphical representation of system components

Standalone RapidRecall keypad

Version 2 RapidRecall keypad

Rear Panel

Serial

Power

Network

Config

DCOM over TCP/IP

The Version 2 RapidRecall Keypad has an IP address reserved by the DHCP server.

9-pin female D-type

RapidRecall keypad power

Mains power supply

Country specific adapter (supplied)

Power supply

12V DC

DHCP Server

ETHERNET

Ethernet Switch/Router

DCOM over TCP/IP

Host Clarity system to be controlled by RapidRecall keypad

Clarity system unit running the RapidRecall Keypad Sever and a copy of the CG Tools software. This is the system to be controlled by the RapidRecall keypad.

Clarity system unit

CG Tools software (Clarity.exe)

DCOM

COM

RapidRecall Keypad Server (RapidRecallKeypad.exe)

6.8.1.9.3   Attach Version 2 RapidRecall Keypad to Ethernet network and power source (1)

With the power supply correctly configured (Ensure power supply is correctly configured) [216], you can now attach the keypad to the ethernet network and power source.

1. Plug one end of the user supplied ethernet cable into the RJ45 connector on the keypad rear panel.
2. Plug the other end of the RJ45 cable to an available port on your ethernet switch/router.
3. Plug the 9-pin female D-type connector on the supplied power cable into the Power 9-pin male D-type connector on the keypad rear panel.
4. Make sure that your county specific adaptor plug is connected securely and the voltage dial set [216]. Connect the power supply to the mains (100V-240V~50/60Hz) but ensure that he mains supply is OFF.

If is not possible to switch off the mains supply, then do not connect the power supply at this stage.

Continue to Reserve IP address on DHCP server [231].

6.8.1.9.4   Reserve IP address on DHCP server (2)

Once you have connected the Version 2 Rapid Recall keypad to the ethernet network and power supply, you can configure the DHCP server to reserve an IP address that corresponds to the MAC address of the keypad.

Dynamic Host Configuration Protocol (DHCP) is an IP standard designed to reduce the complexity of administering IP address configurations. A DHCP server would be set up with the appropriate settings for a given network. Such settings would include a set of fundamental parameters such as the gateway, DNS, subnet masks, and a range of IP addresses. Using DHCP on a network means administrators don't need to configure these settings individually for each client on the network. The DHCP would automatically distribute them to the clients itself.

The DHCP server assigns a client an IP address taken from a predefined scope for a given amount of time. If an IP address is required for longer than the lease has been set for, the client must request an extension before the lease expires. If the client has not requested an extension on the lease time, the IP address will be considered free and can be assigned to another client. This will remove the current IP address and request a new one. Reservations can be defined on the DHCP server to allow certain clients to have their own IP address. Addresses can be reserved for a MAC address or a host name so these clients will have a fixed IP address that is configured automatically.

Because the RapidRecall Keypad Server application needs to know the IP address of the desired RapidRecall Keypad on the same ethernet network, this address has to remain static so that it does not have to be configured each time the keypad is turned on. Because the majority of ethernet networks utilise a DHCP server to allocate IP addresses, if an IP address is not reserved for the keypad by the DHCP server, then there is no way of guaranteeing that the same IP address is allocated for the keypad.

Please refer to the following Microsoft resources for more information on reserving an IP address for the keypad on Microsoft® Windows® Server 2003. *It not a requirement for the DHCP server to be running a Microsoft® Windows® operating system (e.g. a DHCP server can run Linux or UNIX etc.) and the DHCP standard is not linked to Microsoft in anyway.*

Microsoft publication or web page		URL
Dynamic Host Configuration Protocol for Windows Server 2003		http://download.microsoft.com/download/1/6/a/16a11c96-daa4-44a6-98ae-9f9ddb203b46/DHCP2003.doc
Manage Reservations and Reserved Clients		http://technet2.microsoft.com/WindowsServer/en/Library/80ad2423-49fc-4483-9ea3-2ebd1adacf8c1033.mspx
	Add a client reservation	http://technet2.microsoft.com/WindowsServer/en/Library/78171281-13f4-4446-8ee2-431cb79ae6df1033.mspx
	Change information for a reserved client	http://technet2.microsoft.com/WindowsServer/en/Library/50c7b444-f970-4cd3-b604-daefbd5f874c1033.mspx

During the reservation process, either the New Reservation or Properties dialog box will be displayed. Below is an example with the MAC address configured for the keypad:

231   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
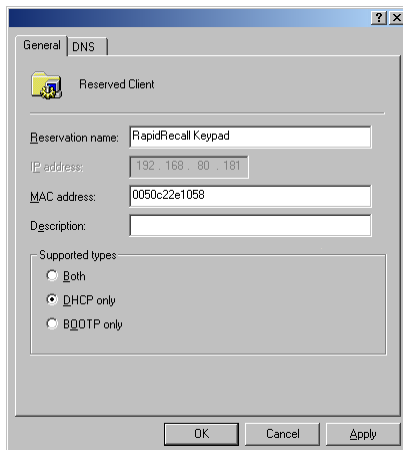
Continue to Power up Version 2 RapidRecall keypad and check IP address allocation 232.

6.8.1.9.5 Power up Version 2 RapidRecall keypad and check IP address allocation (3)

With the keypad connected to the Ethernet network and power supply, you can now power up the keypad and check that the reserved IP address has been allocated by the DHCP server.

1. If the power supply is connected to a switched mains outlet, switch on the outlet. If the outlet is not switched and you have not yet plugged in the supplied power supply, do so now. The red LED on the power supply should illuminate.
2. The keypad display should illuminate and short beep is heard. The following message is shown on the keypad display:
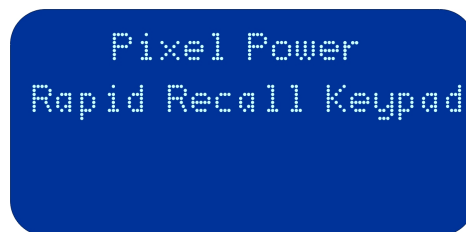
3. If all is well, the message will remain. To check the IP address allocated to the keypad by the DHCP server, press the Config button on the rear panel 213 using a small blunt implement (e.g. pen). The allocated IP address is displayed whilst the button is pressed:
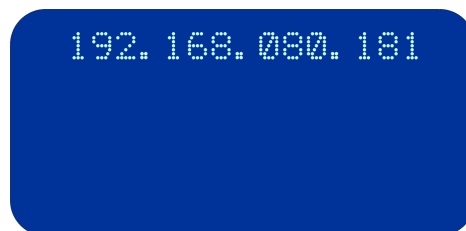
If the IP address shown does NOT match the IP address expected, then the reservation has failed on the DHCP server. Check the reservation settings on the DHCP server 231.

4. If the DHCP server cannot be located, the following message is displayed in conjunction with a repetitive alarm approximately 15 seconds after the default boot message is displayed:
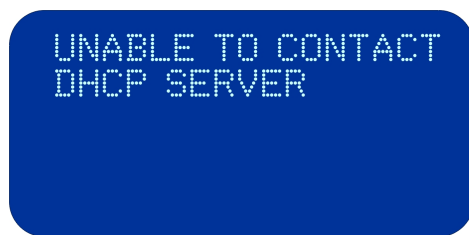
This message is displayed in circumstances where the DHCP server cannot be located. This may be due to:

- transient networking problems;
- the DHCP server is not on the same domain as the keypad.

Continue to Login into Microsoft® Windows® on host Clarity system unit with administrator rights [233].

6.8.1.9.6 Login into Microsoft® Windows® on host Clarity system unit with administrator rights (4)

Follow the steps below:

1. Start the host Clarity system unit in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges (e.g. Administrator).

Continue to Configure DCOM settings on host Clarity system [233].

6.8.1.9.7 Configure DCOM settings on host Clarity system (5)

In this example, information between the CG Tools software and the RapidRecall Keypad Server application is communicated using COM due to both software applications being installed on the same system. If the RapidRecall Keypad Server application is installed on a machine other than the Clarity host, then DCOM is used.

It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.

For this example, only DCOM settings for the Clarity executable on the host Clarity system have to be configured. You must be logged in as a user with administrator privileges to configure DCOM and firewall settings.

To enable DCOM access for the Clarity executable on the host Clarity system, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for the CG Tools software application on HOST systems [1068]

If the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then DCOM settings for this application will also have to be configured. To enable DCOM access for the RapidRecall Keypad Server (RapidRecallKeypad.exe) executable, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for software applications on REMOTE systems [1062]

After configuring the required settings, continue to Open the keypad communication port through the Windows firewall

6.8.1.9.8 Open the keypad communication port through the Windows firewall on the host Clarity system (6)

For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on the host Clarity system. This enables un-impeded communication between the RapidRecall Keypad Server application and the selected CG Tools software derivative (Clarity.exe).

It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on that machine AND additional firewalls present within the ethernet network infrastructure.

Follow the steps below:

1. Select Start>Control Panel. The Control Panel is displayed (category view shown below; differs to optional classic).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   234

Copyright © 2000-2006 Pixel Power Ltd.

2.   Select Security Centre. The Security Centre is displayed.

3.   Select Windows Firewall. The Windows Firewall dialog box is displayed.

4.   Ensure that the On box is checked.
5   Select the Exceptions dialog tab.
6.   Select Add Port. The Add a Port dialog box is displayed.

7. To enable incoming and outgoing communication on port 10255, enter RapidRecall Keypad in the Name text box and 10255 in the Port Number box.

8. Select OK to close the Add a Port dialog box. This will add a new TCP/IP port 10255 under the name RapidRecall Keypad.
9. Select OK to close the Windows Firewall dialog box.

6.8.1.9.9   Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (7)

With the RapidRecall keypad running, the correct IP address allocated and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Server application. The RapidRecall Keypad Sever application communicates between a defined RapidRecall keypad and a Clarity system unit being used for playout. The application has the facility to connect to keypads that are connected both via an ethernet network and via a serial port on the local host system.

The program shortcut can feature various command line switches that configure how the application is started.

By default, the RapidRecall Keypad Playout Control Server shortcut is placed in the following program group:

```
C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd.
```

Note that this is the default installation location and this may be different to the CG Tools installation on your system.

To edit the shortcut:

1. Select Start>All Programs>Pixel Power Ltd.
2. Right-click on the RapidRecall Keypad Playout Control Server shortcut and select Properties from the shortcut menu. The RapidRecall Keypad Playout Control Server properties box is displayed.

3. Edit the shortcut in the Target text box.

Below is the shortcut target used in this example:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   236

Copyright © 2000-2006 Pixel Power Ltd.

```
"C:\Program Files\Pixel Power Ltd\Bin\RapidRecallKeypad.exe" –TYPE NETWORK –IPADDRESS
192.168.080.181 –CLARITY localhost –AUTOCONNECT
```

This shortcut configures the RapidRecall Keypad Sever application to connect automatically to the RapidRecall keypad on the ethernet network with the IP address `192.168.80.181` and connect to a copy of the CG Tools software on the host Clarity system unit (`localhost`). For more information on the full complement of available switches and their parameters, see <u>RapidRecall Keypad Server shortcut command line switches</u> 1027 .

Continue to <u>Start the RapidRecall Keypad Server on host Clarity system unit</u> 237 .

6.8.1.9.10   Start the RapidRecall Keypad Server on host Clarity system unit (8)

Now that you have configured the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.

1.   Select Start>All Programs>Pixel Power Ltd>RapidRecall Keypad Playout Server. The RapidRecall Keypad Server application is started.

a)	The first thing that occurs is that the RapidRecall Keypad Server application checks what mode to start in. This corresponds to the `–TYPE` switch defined in the shortcut (in this case `NETWORK`). This setting configures the application to use the GUI related to network operation.
b)	The RapidRecall Keypad Server application then checks the Clarity system unit on which to start the CG Tools software derivative. This corresponds to the `–CLARITY` switch defined in the shortcut (in this case `localhost`).
c)	The installed CG Tools software derivative (in this case Clarity) is then started using a COM/DCOM connection.
d)	The RapidRecall Keypad Server application then tries to connect automatically to the defined RapidRecall keypad. This corresponds to the `–IPADDRESS` switch defined in the shortcut (in this case `192.168.080.181`) and the `–AUTOCONNECT` switch.

2.   After the above has been completed successfully, the RapidRecall Keypad Server application starts in the network GUI configuration. Whilst the RapidRecall Keypad Server application is starting, the <u>System Tray icon</u> 1028 (default Pixel Power icon) is yellow. Once it has started successfully, the icon is blue. If the application does not appear automatically, right-click on the icon in the System Tray and select Restore from the <u>shortcut menu</u> 1028 .

Some parts of user interface are greyed out due to the keypad already being connected. The setting selected in the Display Mode group will affect what is displayed on the <u>keypad display after connection</u> 241 . The setting selected in the Selected Channel group box is indicated by an asterisk next to the channel label on the keypad display. For more information in the RapidRecall Keypad Server GUI, see <u>Description of the RapidRecall Keypad Server GUI</u> 1026 .

6.8.1.10   Description of keypad keys

The following keys descriptions are available:

[Keypad synopsis for Playout Control](#) 238

6.8.1.10.1   Keypad synopsis for Playout Control

The illustration below shows the dedicated keys available with the [Version 2 RapidRecall keypad](#) 214 and [RapidRecall virtual keypad application](#) 103 with the Playout Control key configuration. Click on a key to learn more (online documentation only).

Key	Details			
	Action	**+ Key**	**Action**	**[Keypad display area affected or used](#) 241**
Del	Delete character to the right of the cursor in the keypad numeric entry field on the keypad display.			- - - -
0	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
Clr	Delete all numeric characters from the keypad numeric entry field on the keypad display.			- - - -
1	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Multi-Channel Column. *Must be pressed and held down before pressing the secondary key.*	[See Display Mode group box.](#) 1026

Key	Details			
	Action	**+ Key**	**Action**	**Keypad display area affected or used** |24↑|
2	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Multi-Channel Row. *Must be pressed and held down before pressing the secondary key.*	See Display Mode group box. |102b|
3	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Single Channel. *Must be pressed and held down before pressing the secondary key.*	See Display Mode group box. |102b|
4	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
5	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
6	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
7	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
8	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
9	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
Take	Takes the page or still shown by the keypad Prev or Pr field value to the selected channel and displays it on the Program output.			- - - -
	If no page/still is cued (shown by the keypad Prev or Pr field value), takes the page/still corresponding to the value present in the keypad numeric entry field and then displays it on the Program output as fast as possible.			- - - -
	Updates the keypad Air field to match the currently aired page.			- - - -
	Updates the Page Name fields (if relevant) to match the currently aired page.			
Cue	Prepares the page or still shown by the keypad numeric entry field value to the selected channel and displays it on the Edit output.			- - - -
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Next	Prepares the next page/still for the selected channel in the current job/stack and displays it on the Edit output.			- - - -
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Prev	Prepares the previous page/still for the selected channel in the current job/stack and displays it on the Edit output.			
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Page Stack	Toggles the use of the current page stack if present. An S before the keypad numeric entry field indicates that the system is in page stack mode.			- - - -
Pause	Pause playout (e.g. pause foreground rolls or crawls).			

Key	Details			
	Action	**+ Key**	**Action**	**Keypad display area affected or used** [241]
Abort	Aborts the playout of the current page and idles the channel.			
	Updates the keypad Stat field for the selected channel to Idle.			
Trigger	Toggle trigger mode. *Must be pressed and held down before pressing the key sequence on the numeric keypad to trigger the animation. On the RapidRecall virtual keypad, a single press will toggle the Trigger key on, enabling the subsequent selection of a key sequence on the numeric keypad to trigger the animation.*	Numeric sequence	Triggers animation on current page relating to numeric key sequence.	
Alt	Provides temporary access to a secondary function on a selected key. *On the RapidRecall virtual keypad, a single press will toggle the Alt key on, enabling the subsequent selection of an operator key.*		See other keys for more details. *Must be pressed and held down before pressing the secondary key.*	
Chan	Toggle current keypad channel selection. The relevant channel field (s) are updated on the keypad display with an asterisk (*) to indicate selection.	Alt	Select all available channels. The relevant channel field(s) are updated on the keypad display with an asterisk (*) to indicate selection.	
DSK Fgnd	Set current selected channel DSK mode to foreground.	Alt	Set current selected channel DSK mode to foreground with fade.	
DSK Bgnd	Set current selected channel DSK mode to background.	Alt	Set current selected channel DSK mode to background with fade.	
DSK Mix	Set current selected channel DSK mode to mix.	Alt	Set current selected channel DSK mode to mix with fade.	
DSK Black	Set current selected channel DSK mode to output black.	Alt	Set current selected channel DSK mode to output black with fade.	

6.8.1.11 Description of keypad operating mode displays and channel status
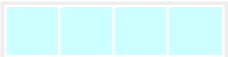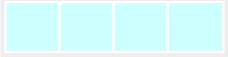
The following descriptions are available:

Channel status [240]
Display synopsis for Playout Control [241]
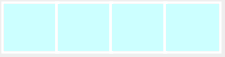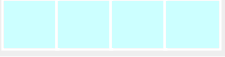
6.8.1.11.1 Channel status

The available status messages that can be displayed by the Stat field on the keypad display are explained below:

Message	Description	Keypad display area affected or used
Off	Channel currently offline.	
Idle	Channel currently idle.	
Wait	Channel currently awaiting take.	

Message	Description	Keypad display area affected or used
Prep	Channel currently preparing page.	
Take	Channel currently taking page.	

6.8.1.11.2 Display synopsis for Playout Control

This section explains the available display modes for the keypad with a Playout Control configuration.

Multi Channel-Column

```
S‥‥‥‥‥  Ch1*  Ch2*  Ch3*
   Air  ‥‥‥‥  ‥‥‥‥  ‥‥‥‥
  Prev  ‥‥‥‥  ‥‥‥‥  ‥‥‥‥
  Stat Off   Off   Off
```

A synopsis of the display is shown below:

S	-	-	-	-		**C**	**h**	**1**	*****		**C**	**h**	**2**			**C**	**h**	**3**		
		A	**i**	**r**		-	-	-	-		-	-	-	-		-	-	-	-	
	P	**r**	**e**	**v**		-	-	-	-	**+**	-	-	-	-		-	-	-	-	
	S	**t**	**a**	**t**																

S	-	-	-	-	(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.
					(Blue) These areas show the channels available.
					An asterisk (*) indicates the channel is selected.
	-	-	-	-	(Yellow) These areas show the current pages on air.
	-	-	-	-	(Purple) These areas show the current prepared pages.
					A '+' indicates a page is being prepared.
					(Light Blue) These areas show the current channel status.

Multi Channel-Row

```
Ch1* ------ page name
Ch2* ------ page name
Ch3* ------ page name
S------ Pr ------+ Off
```

A synopsis of the display is shown below:

	C	h	1	*		-	-	-	-											
	C	h	2			-	-	-	-											
	C	h	3			-	-	-	-											
S	-	-	-	-		P	r		-	-	-	-	+							

-	-	-	-		(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.
					(Blue) These areas show the channels available.
					An asterisk (*) the channel is selected.
-	-	-	-		(Yellow) These areas show the current pages on air.
					(Light Green) These areas show the names of the current pages on air.
-	-	-	-		(Purple) This area shows the prepared page for selected channel.
					A '+' indicates the page is being prepared.
					(Light Blue) This area shows the channel status for the selected channel.

Single Channel

```
Ch1* 625 (4:3)
  Air ----- page name
Prev -----+page name
Stat Offline  S-----
```

A synopsis of the display is shown below:

	C	h	1	*		6	2	5		(	4	:	3	)					
		A	i	r	-	-	-	-											
	P	r	e	v	-	-	-	-	+										
	S	t	a	t										S	-	-	-	-

(Blue)					(Blue) This area shows the selected channel.
					An asterisk (*) the channel is selected.
(Light Purple)					(Light Purple) This area shows the current video format of selected channel.
-	-	-	-		(Yellow) This area shows the current page on air.
(Light Green)					(Light Green) This area shows the name of the current page on air.
-	-	-	-		(Purple) This area shows the prepared page for the selected channel.
					A '+' indicates the page is being prepared.
(Red)					(Red) This area shows the name of the prepared page.
(Light Blue)					(Light Blue) This area shows the channel status for the selected channel.
-	-	-	-		(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.

6.8.1.12   More information regarding other installation configurations

At this point, no written information is available regarding keypad installations on ethernet networks that DO NOT not use a DHCP server to allocate an IP address or installations that utilise non-standard port numbers.

At this stage, contact Pixel Power Technical Support [103] for more information.

6.9 Concepts

The subsequent sections detail some important concepts that you should get to grips with before familiarising yourself with the Graphical User Interface.

Concept	Description
Foreground and background page editing 244	Explains how pages are construction in order to understand how they can be created and subsequently edited.
Page modes 244	Explains the different page control modes that the software can operate in. These mode affect how playout is controlled.

6.9.1 Foreground and background page editing

Most drawing operations can be performed in both the background or foreground layers.

The background layer contains a picture. This can be a simple shading, a full frame picture or live video. The foreground layer can contain multiple foreground page elements.

A foreground page element can be a graphic shape, a bitmap image or a page/line of text. Each foreground element is stored on its own respective layer within the foreground.

The order in which elements are placed on the page, where possible, is used as the play list order when the page is being played out whilst online.

Page editing is performed in either the background or foreground layer. Editing the background involves working with the raster bitmap background in the way of a traditional paint system. Foreground editing is based on the principle of selecting a layer from the foreground and then editing the individual characteristics of the page element stored on that layer.

Any page element which has been drawn into the foreground can be edited at any time, even if subsequent foreground elements have been placed on top of it. However, when working in the background, once a page element has been stuck down, it cannot be changed.

The other main difference between the foreground and background layers is that the foreground does not have a predefined size; it can extend to the left, right and bottom of the conventional picture area to enable single page rolls and crawls to be created.

6.9.2 Page modes

The Job/Page toolbar 248 can be used to select the mode in which the current job is to be used. The following modes are available:

Mode	Description
Edit/Prog	To use software to output foreground animation.
Subtitle/Timecode	To use the software for outputting subtitles or to enable the control of a job from an edit controller or Easy Reader 2 LTC/VITC timecode reader/generator.
Internal Timecode	To use the software for outputting subtitles under the control of a Clarity system units' internal timecode generator.
Stills Mode	Requires description <PAW>.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   244

Copyright © 2000-2006 Pixel Power Ltd.

6.10 Graphical User Interface (GUI) tour

This section explains details of the GUI components. Below is a typical working view showing the main GUI components: the Main application window 246, the Job Edit window 250, the Graphic Edit window 260, the Graphic Tools 266 and the Page Stack 325.

Click on an area for more information (online documentation only).
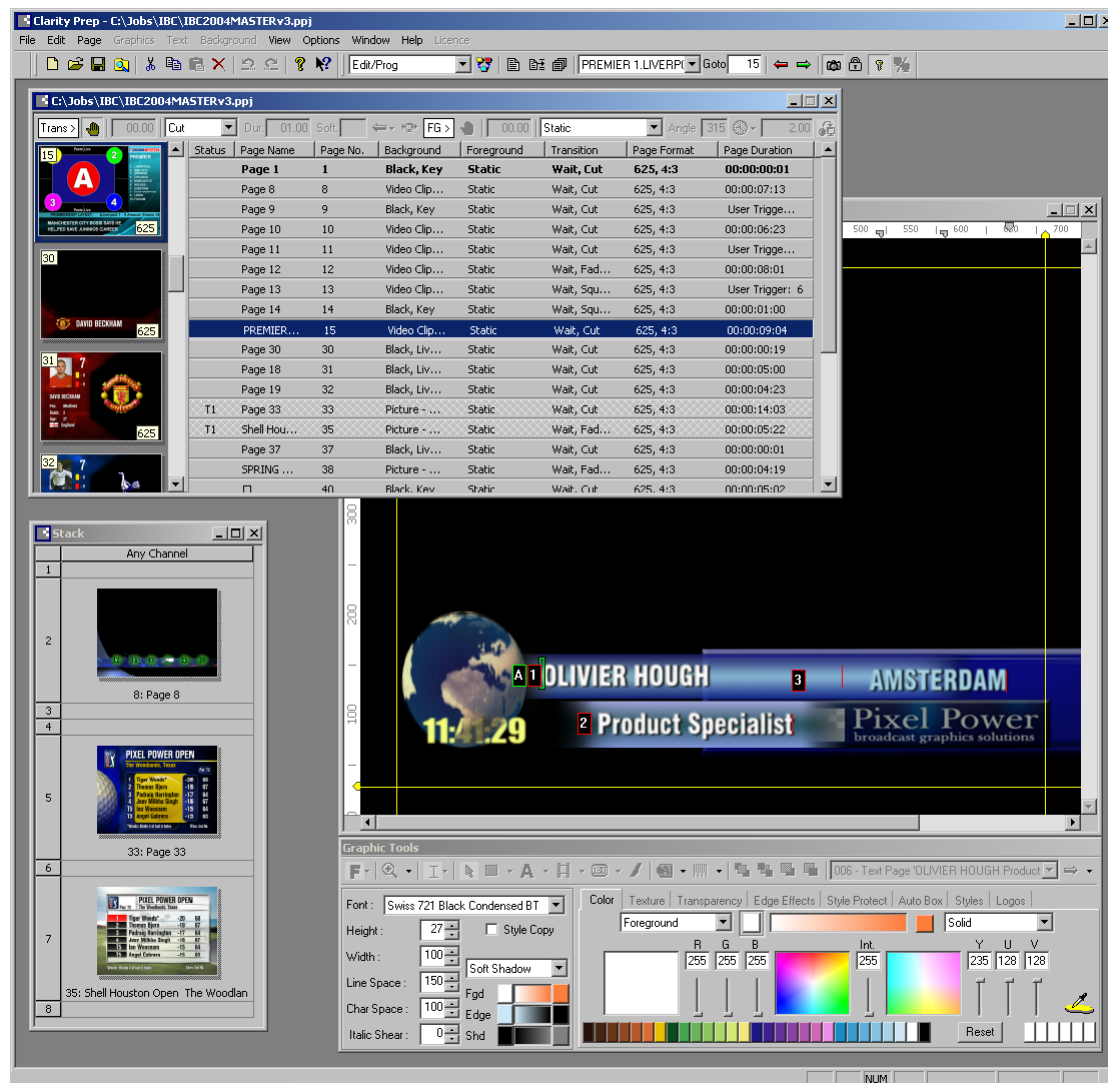
6.10.1 Main CG Tools application window

The CG Tools main application window appears after the software has loaded. When starting the software for the first time, it appears by default at full screen size (but not maximised). The usual Microsoft Windows conventions apply when manipulating (minimising, moving etc.) the main application window.

Click on a balloon to find out more (online documentation only).

6.10.1.1 Title bar

The title bar displays the following useful information when working:

```
<software product> <derivative> - <job name> or <job path>
```

Variables	Description	Examples
`<software product>`	Name of current software product [7] in the Pixel Power CG Tools range.	Clarity Clarity PREP
`<derivative>`	Name of current software product derivative [8]	TG, CG, GX
`<job name>`	The name of the job that is currently open.	JOB 1
`<job path>`	Optionally, you can display the path AND name of the job that is currently open. This can be configured by selecting Options> [429] User Preferences [430] to display the User Preferences dialog box [809]. On the General dialog tab [816], check the Display full job path in title bar [816] box.	C:\NEWS\Newsreel.ppj

6.10.1.2 Menu bar

The menu bar along the top of the main application window provides access to a large proportion of the functionality and features of the CG Tools software. Many of the commands available from within these menus are also mirrored by the tools available on the Standard [247], Job/Page [248], Transition [257] and Foreground [256] toolbars within the Job Edit window [250]. The menus that are available for selection are dependant on what you doing within the software application. As a simple guide, there are four stages which can be identified.

	Application Status	Description	Menus available
A	No job currently open	Menu availability is severely limited in this case and as such software functionality is limited to file based operations and software configuration.	File 378 Options 429 Help 434 Licence 435
B	Page stack open	Edit and View menus are changed to offer suitable functionality when working with page stacks	File 378 Edit(Page Stack) 388 View(Page Stack) 427 Options 429 Window 433 Help 434 Licence 435
C	Job currently open but Graphic Edit window 260 is not displayed	This is the default look when the CG Tools software is started. Additional job based menu availability over and above status A include page configuration, viewing of controls and windows etc.	File 378 Edit(Job) 384 Page 390 View(Job) 421 Options 429 Window 433 Help 434 Licence 435
D	Job open and page being edited with Graphic Edit window 260	The highest level of availability. Some sub menu commands may be restricted based upon current page editing status within the Graphic Edit window.	All menus 378

To learn more about the menus and commands in the menu bar, see the Menus 378 section for more information.

6.10.1.3   Standard toolbar

Functions available from the Standard toolbar are mirrored either by commands in the Menu bar 246, by user actions or by related dialog box controls. To toggle the display of the Standard toolbar, select View> 421 Toolbars>Standard toolbar 426. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Name	Related menu command or user action	Related dialog box control		
			Dialog box	Dialog Tab	Control
	New	File> 378 New Job 379 File> 378 New Stack 380			
	Open	File> 378 Open Job 380 File> 378 Open Stack 380			
	Save	File> 378 Save Job 380 File> 378 Save Stack 380 File> 378 Save Job As 380 File> 378 Save Stack As 381 File> 378 Save All 381			
	Clarity Explorer	File> 378 Clarity Explorer 382			
	Cut	Edit(Job)> 384 Cut 385 Edit(Stack)> 388 Cut 388			
	Copy	Edit(Job)> 384 Copy 386 Edit(Stack)> 388 Copy 389			
	Paste	Edit(Job)> 384 Paste 386 Edit(Stack)> 388 Paste 389			
	Delete	Edit(Job)> 384 Delete 386 Edit(Stack)> 388 Delete 389			
	Undo	Edit(Job)> 384 Undo 385			

	Redo	Edit(Job)> [384] Redo [385]			
	Export Page	File> [378] Export>Export Page [382]			
	Export Pages	File> [378] Export>Export Pages [382]			
	About	Help> [434] About [435]			
	What's This?	Help> [434] What's This? [434]			
	Keyboard Active/ Reset Keyboard	Illuminates when the connected keyboard is active i.e. keys are being pressed. Select the tool if it become permanently illuminated as this indicates that the keyboard is no longer communicating with the CG Tools software (File> [378] Reset Keyboard [384]).			

6.10.1.4 Job/Page toolbar

Functions available from the Job/Page toolbar are mirrored either by commands in the Menu bar [246], by user actions or by related dialog box controls. To toggle the display of the Job/Page toolbar, select View> [421] Toolbars>Job/Page toolbar [426]. New or edited tools since the last release are highlighted with dark grey shading.

The tools on this toolbar are only enabled when the Job Edit window is displayed i.e. a job is open for editing.

Tool	Name	Related menu command or user action	Related dialog box control		
			Dialog box	Dialog Tab	Control
Subtitle	Select Page Mode				
	3-Way Playout Mode		Job Options [679]	General [680]	Operate in '3 Way' mode check box [683]
	New Page	Page> [390] Add New [391]			
	Insert Page	Page> [390] Insert New [391]			
	Stack	File> [378] Import>Import Image Stack [382]			
Page 1	Select Page	• Double-click on page in Page Browser or Page list OR • Enter page number using numeric keypad and then press the Read key on the Rapid Action keyboard			
Goto	Goto Page Number	Page> [390] Goto [391]			

Tool	Tool Name				
	Previous Page	Page>[390]Previous[391]			
	Next Page	Page>[390]Next[391]			
	Page Live	Page Settings[751]		Key /[763]Matte	Mix page over live in check/group box[763]
	Page Protect	Page Settings[751]		Key /[763]Matte	Use key protect check/group box[764]
	Page Key		Page Settings[751]	Key /[763]Matte	Include background key in output video check box[763]
	Output Channel				

6.10.1.5   Arabic toolbar

The Arabic toolbar enables the selection of various text typing settings that are only relevant when typing Arabic characters. To toggle the display of the Arabic toolbar, select Options>[429]Language Selection>Arabic Windows[433]. New or edited tools since the last release are highlighted with dark grey shading.

Note that the Arabic toolbar can only be docked on the left or right edges of the main CG Tools application window.

Tool	Tool Name	Description
	Reverse Typing Direction	Toggles the default typing direction left-to-right or right-to-left for new text graphics. Same as Text>[408]Typing Direction>Right to Left Across Page[417].
	Reverse Text Flow	Toggles the typing of text against the natural text-flow. (This is useful for inserting English text within an Arabic sentence).
	Arabic Numbers	Toggles whether to insert Latin or Arabic numbers.

SEE ALSO

Configuring Microsoft® Windows® XP and CG Tools for Arabic text entry[506]
Options>[429]Language Selection>Arabic Windows[433]

6.10.1.6   Status bar

The Status bar displays details of what tools, controls, and menu commands do as you move the mouse cursor over them. The Status bar the bottom can also show the following information.
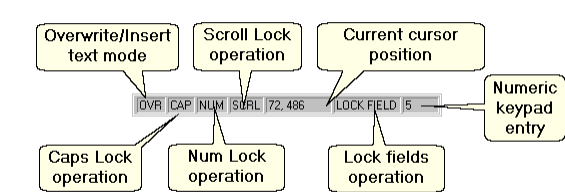
To toggle the display of the status bar, select View>[421]Toolbars>Status Bar[426].

6.10.1.7   Configuring the look of the main CG Tools application window

The main CG Tools application window can be configured to start in a maximised state[250] and the user interface windows can be locked[250] in their current position.

6.10.1.7.1   Locking user interface windows

The Job Edit window 250 and Graphic Edit window 260 can be locked in their current position so that they cannot be manipulated. This is useful when trying to set up a static working user interface that is consistent.

To enable the locking of user interface windows, follow the steps below:

1.   Select Options> 429 User Preferences 430. The User Preferences dialog box 809 is displayed.
2.   Select the General dialog tab 816.
3.   In the Clarity Start Up group box 817, check the Lock Windows box 817.

6.10.1.7.2   Starting the application window in a maximised state

The main CG Tools application window can be started in maximised window if desired.

To enable the this feature, follow steps below:

1.   Select Options> 429 User Preferences 430. The User Preferences dialog box 809 is displayed.
2.   Select the General dialog tab 816.
3.   In the Clarity Start Up group box 817, check the Start the application maximised box 817.

6.10.2   Job Edit window

The Job Edit window appears only when a job is loaded. It provides thumbnail previews of pages, the listing of page configuration settings, as well as access to a variety of page based settings via the Transition toolbar 257 and Foreground toolbar 256.

Click on a balloon to find out more (online documentation only).
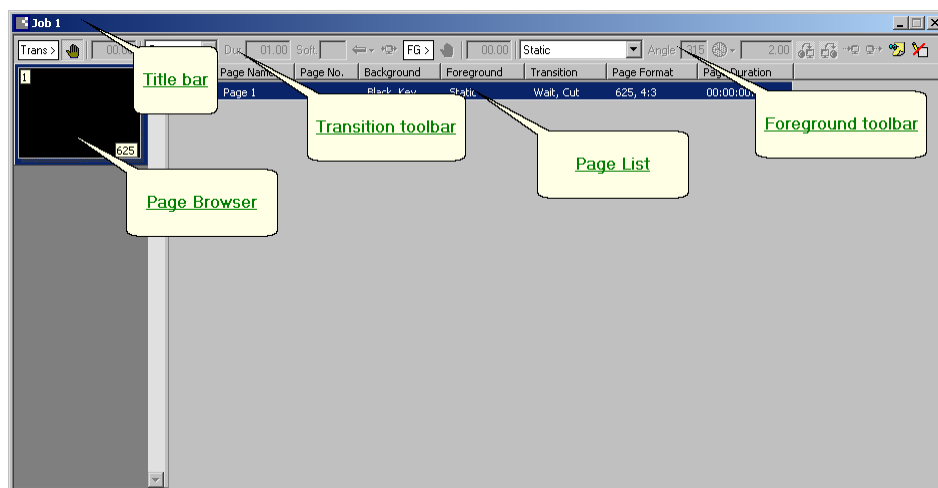
6.10.2.1   Title bar

The title bar displays the following useful information when working:

```
<job name> or <job path>
```

Variables	Description	Examples
<job name>	The name of the job that is currently open.	JOB 1

Variables	Description	Examples
`<job path>`	Optionally, you can display the path AND name of the job that is currently open. This can be configured by selecting Options> [429] User Preferences [430] to display the User Preferences dialog box [809]. On the General dialog tab [816], check the Display full job path in title [816] bar box in the Clarity Job Load group box [816].	C:\NEWS\Newsreel.ppj

6.10.2.2 Page Browser and Page List

6.10.2.2.1 Page Browser

The Page Browser displays succinct information about pages contained in the current job via annotations:

- thumbnail previews of all pages;
- identification of pages via page number and/or page name;
- identification of page video format (525, 626 etc.);
- playout and template status of pages.

The Page List also enables a number of useful functions to aid the management of pages within the current job, in the same way as the Page List. These include:

- selection of one or more pages;
- manipulation of page order via cut, copy and paste;
- identification of page playout groups via colour coding;

The display of the Page Browser can toggled using the View> [421] Job View>Page Browse [423] command. The picture below show the different annotations available on page previews within the Page Browser.
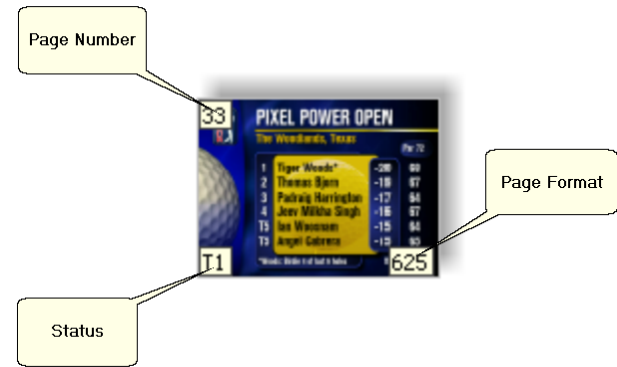
An explanation of the annotations available in the Page Browser are given below:

Annotation	Description
Status	Displays information about pages that are currently either On Air or Cued. It uses simple codes to indicate the page status, and a numerical value to indicate what channel this status applies to. For example , a status of A1 means On Air on channel 1, C2 means Cued on channel 2 and A1,C2 means On Air on channel 1 and Cued on channel 2. This column can also indicate which page, if any, is being used as the template page e.g. it will display T10 if the page is based on template page 10, or T101 if it is based on template page 101. Pages that are created via an automation system can only be based on template pages.
Page No	Displays the page number. Page numbers are allocated on page creation and remain assigned even when they are moved to a new position in the Page List. Re-ordering of page numbers can be achieved after extensive changes using the Edit> [384] Renumber Pages [387] command.
Page Format	Displays the page video format. Page video format can be changed on a page by page basis, independently of the job video format and aspect ratio. See the Page Format dialog tab [765] on the Page Settings dialog box [751].

251   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.10.2.2.2   Page List

The Page List displays a wealth of information about pages contained in the current job via a number of columns:

- playout and template status of pages (Status column).
- identification of pages via page number and/or page name (Page Name and Page No columns);
- display of page settings (Background, Foreground and Transition columns);
- identification of page video format (525, 626 etc.) and aspect ratio (Page Format column);
- duration of pages (Duration column);
- timecode in and out points (Timecode In and Timecode Out columns)

You can control which columns are displayed and which are hidden depending on your desired preference. Use the controls in the Columns to show group box [677] on the Job List View - Display Options dialog box [677] to toggle the display of available columns in the Page List.

The Page List also enables a number of useful functions to aid the management of pages within the current job, in the same way as the Page Browser. These include:

- selection of one or more pages;
- manipulation of page order via cut, copy, paste and delete;
- identification of page playout groups via colour coding;

The display of the Page List can toggled using the View> [421] Job View>Page List [423] command.

Whilst online, if a page containing triggers is on-air, trigger keys cannot work if a page is open for editing in the Graphic Edit window [260] and a text element on that page is selected. This is due to keypress being interpreted by the text element being edited. When a text element is selected that contains a trigger and you have selected to keep online cued pages visible and have also checked the Auto Select Online Aired Page box [678] on the Job List View - Display options dialog box [677], when triggers cannot be sent to one of the on-air channels, the page is highlighted red in the Page List. Additionally, a warning message is added to the title bar [346] of the Playout Controls control box [343] and the current playout channel is highlighted red in the Page playout information area [344].

An explanation of the columns available in the Page List are given below:

Column	Description
Status	Displays information about pages that are currently either On Air or Cued. It uses simple codes to indicate the page status, and a numerical value to indicate what channel this status applies to. For example, a status of A1 means On Air on channel 1, C2 means Cued on channel 2 and A1,C2 means On Air on channel 1 and Cued on channel 2. This column can also indicate which page, if any, is being used as the template page e.g. it will display T10 if the page is based on template page 10, or T101 if it is based on template page 101. Pages that are created via an automation system can only be based on template pages.
Template	Enables the page to be configured as a read-only template page upon which other pages can be based. See Page> [390] Template [394] for more information. Check the box to configure the page as a template page. The entry will be subsequently highlighted in bold. See Configuring how template pages are shown [259] for more information. Under automation control, template page are not updated.
Page Name	Displays the page name. Page names default to a textual description of the page number e.g. Page 1. They can also be configured automatically so that they utilise the first characters contained in the first text page on the page (see Automatically generate name from text on page check box [818] in the Page Naming group box [818] on the General dialog tab [816] on the User Preferences dialog box [809]) or manually using a user defined text string (see Page> [390] Auto Set Name [391] and Page> [390] Change Name [392] for more information). Page names are protected from being edited when the page is set as read-only (Page> [390] Foreground Options>Read Only [393]).
Page No	Displays the page number. Page numbers are allocated on page creation and remain assigned even when they are moved to a new position in the Page List. Re-ordering of page numbers can be achieved after extensive changes using the Edit> [384] Renumber Pages [387] command.
Background	Displays the current page background. Displayed as a compounded list of settings, any combination of which can be present depending on the settings of any particular page.
Foreground	Displays the current page foreground animation settings. Displayed as a compounded list of settings, any combination of which can be present depending on the settings of any particular page.
Transition	Displays the current page transition settings. Displayed as a compounded list of settings, any combination of which can be present depending on the settings of any particular page.

Column	Description
Page Format	Displays the page video format and aspect ratio. Page video format and aspect ration can be changed on a page by page basis, independently of the job video format and aspect ratio. See the Page Format dialog tab 765 on the Page Settings dialog box 751.
Page Duration	Displays the entire duration of a page. This duration is an estimation based on a pages' content, transition settings and foreground animation settings. The duration can only be calculated if there are NO user triggers defined for any animation contained on the page.
Timecode In	Displays the timecode reference when a page should be triggered to begin playout. This column is only displayed when the CG Tools software is operating in Timecode/Subtitle page mode. See Job/Page toolbar 248 and Page Modes 244 for more information.
Timecode Out	Displays the timecode reference when a page should be triggered to stop playout. This column is only displayed when the CG Tools software is operating in Timecode/Subtitle page mode. See Job/Page toolbar 248 and Page Modes 244 for more information.
Timecode check box	This column is only displayed when the CG Tools software is operating in Timecode/Subtitle page mode. To ensure that the timecodes specified by the Timecode in and Timecode Out values are used, check this box. Clear this box if you want to revert to normal page timing i.e. pages are completed once all animation is finished.

6.10.2.2.3 Page variables shown by Page Browser and Page List

An explanation of the variables available in the Page Browser and Page List are given below:

Status

Variables	Examples	Notes	Tool (click)
A <channel number>	A1	Denotes that the page is On-Air on the channel listed.	
C <channel number>	C1	Denotes that the page is Cued on the channel listed.	
T <template page number>	T101	Denotes that the page is based on the template page listed. Pages that are created via an automation system can only be based on template pages.	

Page Name

Variables	Examples	Notes	Tool (click)
<Page n>	Page 1, Page 9999		
<string from first text page>	In the news today...	See Automatically generate name from text on page check box 818 in the Page Naming group box 818 on the General dialog tab 816 on the User Preferences dialog box 809 for more information.	
<user defined string>	News Template 213	See Page> 390 Auto Set Name 391 and Page> 390 Change Name 392 for more information.	

Page No

Variables	Examples	Notes	Tool (click)
<nnnn>	1, 213, 9999	4 character limit.	

Background

Variables	Examples		Job/Page tool (click)
`<background type>-<filename>`	Gouraud Picture - Background.tif	Denotes the page background type and additional file path if applicable	
`Live <d><a><b>`		Denotes that the page is mixed over the live video input. This can be the default channel <d> or channel a/b <a><b>.	
`Protect`		Denotes that foreground key protection turned on.	
`Key`		Denotes that the page background key is included in output video.	

Foreground

Variables	Examples	Notes	Foreground tool (click)
`Wait`		Denotes that a wait for take is applied to the page foreground animation.	
`<transition name>`	Crawl, Roll	Denotes the applied foreground transition.	Static
`Dur.<ss:ff>`		Denotes the duration of the foreground transition.	
`Speed <ss:ff>`	Speed 02:00	Denotes the speed of the foreground transition.	
`<start setting> and <finish setting>`	Start Off, Start On Finish Off, Finish Off	Denotes whether foreground objects start/end on/off screen	
`Scroll Lock`	Scroll Lock	Indicates whether the page foreground is scroll locked. See Page [390]>Foreground Options>Scroll Lock [394] for more information.	

Transition

Variables	Examples	Notes	Transition tool (click)
`Wait`		Denotes that a wait for take is applied to the page transition.	
`Delay <ss.ff>`	Delay 02.00	Denotes the delay applied to the page transition.	
`<transition name>`	Push, Slide Off	Denotes the applied page transition.	Cut
`<direction>`	Up, Left	Denotes the direction of animation for certain page transitions.	
`<motion type>`	Linear, Cushion In	Denotes the type of motion effect applied to certain page transition.	
`<duration ss.ff>`	02.00	Denotes the duration of the page transition.	Dur.

Page Format

Variables	Examples	Notes	Tool (click)
`<page video format>`	525, 625	Denotes the page video format	
`<page aspect ratio>`	4:3, 16:9	Denotes the page aspect ratio	

Page Duration

Variables	Examples	Notes	Tool (click)
`<hh:mm:ss:ff>`	00:00:01:24	Denotes the page duration calculated. The duration can only be calculated if there are NO user triggers defined for any animation contained on the page.	

Timecode In/Out

Variables	Examples	Notes	Tool (click)
`<hh:mm:ss:ff>`	00:00:03:45	Denotes the timecode in point	
`<hh:mm:ss:ff>`	00:00:03:45	Denotes the timecode out point	

6.10.2.2.4 Interacting with the Page List using the mouse and keyboard

You can use the mouse to interactively sort and change the page settings shown by the columns in the Page List.

Sorting columns

The Page List can be sorted, much in the same way a spreadsheet in Microsoft Excel. Click on a column heading to toggle the sorting of pages by that setting:

- in the case of numerics, you can toggle between the lowest and highest value first;
- in the case of alphabetic text strings, you can toggle between A-Z at the top or bottom of the column;
- where column values feature compounded text strings and numeric values, they are sorted alphabetically and then by any numeric values that follow.

Editing timecodes

Page timecode values can be edited, simply by double-clicking on a timecode value in either the Timecode In and Timecode Out column. The Timecode In/Out dialog box 807 is displayed where you can edit the value.

Editing Background, Foreground, Transition and Page Format settings

You can access the relevant dialog tab on the Page Settings dialog box for a selected page by simply clicking on the desired value in either Background, Foreground, Transition and Page Format columns. The Page Settings dialog box 751 is displayed on the Background 756, Foreground 760, Transition 767 or Page Format 765 dialog tab, showing the selected pages' settings. With update/revert mode 547 turned on and whilst a page is open for editing in the Graphic Edit window, if you then edit any attributes of the page being edited using the columns in the Page List, the CG Tools software requests if you want to copy changes to an edited copy of the page. The following message is displayed:

Select OK to apply changes to the edited copy of the page or No to return to the page being edited without saving any changes.

255   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
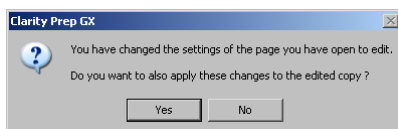
6.10.2.2.5 Shortcut menu

If you right-click on a page in the Page List or Page Browser, the following menu is displayed.

Command	Function
Edit Page Settings	Page> 390 Edit Settings 392
Edit Page Graphics	Page> 390 Edit Graphics 392
Change Background	Page> 390 Change Background 392
Rename Page	Page> 390 Change Name 392
Clear Page Name	Page> 390 Clear Name 392
Auto Set Page Name	Page> 390 Auto Set Name 391
Cut	Edit> 384 Cut 385
Copy	Edit> 384 Copy 386
Paste	Edit> 384 Paste 386
Delete	Edit> 384 Delete 386
Remove	Edit> 384 Remove 386
Replace Foreground	Edit> 384 Replace Foreground 386
Replace Background	Edit> 384 Replace Background 387
Break Links to Global Fields	Page> 390 Break Links to Global Fields 394
Set Page Preview Frame	Page> 390 Set Page Preview Frame 395

6.10.2.3 Foreground toolbar

Functions available from the Foreground toolbar are mirrored by related dialog box controls.

Tool	Name	Related menu command or user action	Related dialog box control		
			Dialog box	Dialog Tab	Control
	Wait		Page Settings 751	Foreground 760	Wait for user input check box 761
	Wait Time		Page Settings 751	Foreground 760	Wait time text box 761
Static	Foreground Movement		Page Settings 751	Foreground 760	Animation Type drop-down list box 761
Angle	Croll Angle		Page Settings 751	Foreground 760	Croll Angle increment box 762
	Foreground Speed		Page Settings 751	Foreground 760	Speed text box 763
	Foreground Duration		Page Settings 751	Foreground 760	Duration text box 763
	Duration/Speed		Page Settings 751	Foreground 760	Duration text box 763 Speed text box 763
	Start On/Off Screen		Page Settings 751	Foreground 760	Start Off check box 762
	Finish On/Off Screen		Page Settings 751	Foreground 760	Finish Off check box 762
	Cushion On		Page Settings 751	Foreground 760	Cushion On check box 762
	Cushion Off		Page Settings 751	Foreground 760	Cushion Off check box 762

| | Stick Foreground | [Page>](#) [390] [Foreground Options>Stick Foreground](#) [393] | | | |
| | Read Only | [Page>](#) [390] [Foreground Options>Read Only](#) [393] | | | |

6.10.2.4   Transition toolbar

Functions available from the Transition toolbar are mirrored by related dialog box controls.

Tool	Name	Related menu command or user action	Related dialog box control		
			Dialog box	Dialog Tab	Control
	Wait		[Page Settings](#) [751]	[Transition](#) [767]	[Wait for user input check box](#) [769]
	Wait Time		[Page Settings](#) [751]	[Transition](#) [767]	[Wait time text box](#) [769]
Cut	Page Transition		[Page Settings](#) [751]	[Transition](#) [767]	[Type drop-down list box](#) [770]
Dur.	Duration		[Page Settings](#) [751]	[Transition](#) [767]	[Duration text box](#) [768]
Soft.	Softness		[Page Settings](#) [751]	[Transition](#) [767]	[Softness increment box](#) [769]
Radius	Radius		[Page Settings](#) [751]	[Transition](#) [767]	[Radius increment box](#) [769]
	Left		[Page Settings](#) [751]	[Transition](#) [767]	[Direction drop-down list box](#) [768]
	Right		[Page Settings](#) [751]	[Transition](#) [767]	[Direction drop-down list box](#) [768]
	Up		[Page Settings](#) [751]	[Transition](#) [767]	[Direction drop-down list box](#) [768]
	Down		[Page Settings](#) [751]	[Transition](#) [767]	[Direction drop-down list box](#) [768]
	Box In		[Page Settings](#) [751]	[Transition](#) [767]	[Box Direction group box](#) [768]
	Box Out		[Page Settings](#) [751]	[Transition](#) [767]	[Box Direction group box](#) [768]
	Cushion		[Page Settings](#) [751]	[Transition](#) [767]	[Motion Type group box](#) [768]
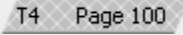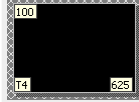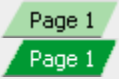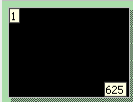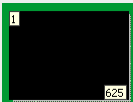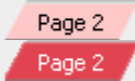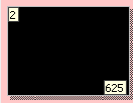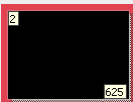
6.10.2.5   Configuring the look of the Job Edit window

Various display options relating both to page status and the automatic sequencing of pages can be configured using the [Job List View - Display Options dialog box](#) [677].

6.10.2.5.1   A guide to how page status is displayed

The following table lists the different conventions used to displaying the differing status of pages within the Page List and Page Browser.

Status	Default Convention		Description
	[Page List](#) [252]	[Page Browser](#) [251]	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Page that are online				Colour coding is used to highlight pages that are online (either cued or on-air).
	Cued			The default setting is a dark blue background with yellow text. This convention formats the page status appearing in the Status column on the Page List and in the bottom-left corner of the page in the Page Browser.
	On-Air			The default setting is a green background with blue text. This convention formats the page status appearing in the Status column on the Page List and in the bottom-left corner of the page in the Page Browser.
Pages that are source templates for other pages		Page 4		Pages in the Page List or Page Browser that are source templates for other pages can be highlighted in bold if desired.
Pages built from source template pages		T4 Page 100		Pages in the Page List that use a template as their basis can be highlighted by intermediate grey hatching if desired. The area surrounding the adjacent page in the Page Browser is also shaded. Pages in the Page List that use a template as their basis can also display a label within the Status column identifying the template page being used. Labels on adjacent page representations in the Page Browser will also display the template ID in the bottom left-hand corner.
Pages that are part of an page sequence				When automatic page sequencing is being used, enhanced visual representation of those pages that start a sequence and those that form part of subsequent sequences can be configured.
	Starting page	Page 1 / Page 1		By default, pages that start a page sequence are shown with a green background. By default, when selected, they are dark green.
	Pages within sequence	Page 2 / Page 2		By default, pages that are part of a sequence are shown with a pink background. By default, when selected, they are dark pink.

SEE ALSO

6.10.2.5.2 Configuring the colour of pages that are online

Colour coding is used to highlight pages that are online. You can configure the colours used to suit your own preferences.

Refer to A guide to how page status is displayed 257 for default examples.

To enable the configuration of how online pages are displayed, follow the steps below:

1. Select Options> 429 Job List View>Display Options 431. The Job List View - Display Options dialog box 677 is displayed.
2. To configure the colour of foreground text and/or the background of the Status column for pages shown in the Page List 252 and Page Browser 251 when they online, select the FG and BG colour boxes and select a colour from the Colour Selection dialog box 599 that appears.

6.10.2.5.3 Configuring how template pages are shown

Template pages can be highlighted in both the Page List and Page Browser.

Refer to A guide to how page status is displayed 257 for examples.

To enable the configuration of how template pages are displayed, follow the steps below:

1. Select Options> 429 Job List View>Display Options 431. The Job List View - Display Options dialog box 677 is displayed.
2. Pages that are templates for other pages can be highlighted in bold if desired. Ensure that the Show Template Page In Bold box 679 is checked. Label text on the adjacent page representation in the Page Browser is also shown in bold.
3. Pages that use a template as their basis can be highlighted by intermediate grey hatching if desired. Ensure that the Shade Templated Pages box 678 is checked. The area surrounding the adjacent page in the Page Browser is also shaded.
4. Pages that use a template as their basis can also display a label within the Status column identifying the template page being used. Ensure that the Show Template Pages ID box 679 is checked. Labels on adjacent page representations in the Page Browser will also display the template ID in the bottom left-hand corner.

6.10.2.5.4 Configuring how pages within an automatic page sequence are shown

When automatic page sequencing is being used, enhanced visual representation of those pages that start a sequence and those that form part of subsequent sequences can be configured. By default, pages that start a page sequence are shown with a green background and those pages that are part of a sequence are shown with a pink background.

Refer to A guide to how page status is displayed 257 for default examples.

To enable the configuration of how pages are displayed within a sequence, follow the steps below:

1. Select Options> 429 Job List View>Display Options 431. The Job List View - Display Options dialog box 677 is displayed.
2. Ensure that the Show Sequence Status box 679 is checked. The controls in the group box become enabled.
3. To configure the colour of pages that start a sequence (both when un-selected and selected), click on either of the Start of page sequence colour selection boxes 679 and select a colour from the Colour Selection dialog box that appears.
4. To configure the colour of pages that continue a sequence (both when un-selected and selected), click on either of the Page in sequence colour selection boxes 679 and select a colour from the Colour Selection dialog box that appears.

259   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.10.3   Graphic Edit window

The Graphic Edit window is the canvas upon which the pages are constructed. The name and number of the page being edited is always displayed in the title bar 260, alongside the current cursor position. To toggle the display of the Graphic Edit window, make sure that a saved job or a new job is open within Clarity or Clarity PREP and then do one of the following:

- double-click on the page preview in the Page Browser 251. The page opens in the Graphic Edit window. Alternatively, you can display the Graphic Edit window by highlighting a page and selecting Page> 390 Edit Graphics 392;
- click within the Goto text box on the Job/Page toolbar 248 and enter the number corresponding to the page that you want to edit, then press Enter. If the new page has not been defined, it will be created with a blank background and foreground;
- from the Pages drop-down list box on the Job/Page toolbar 248, select the page that you want to edit;
- enter the number corresponding to the page that you want to edit on the numeric keypad, then press the Read RapidAction key. If the new page has not been defined, it will be created with a blank background and foreground.

The selected page is opened in the Graphic Edit window for editing. Click on a balloon to find out more (online documentation only).
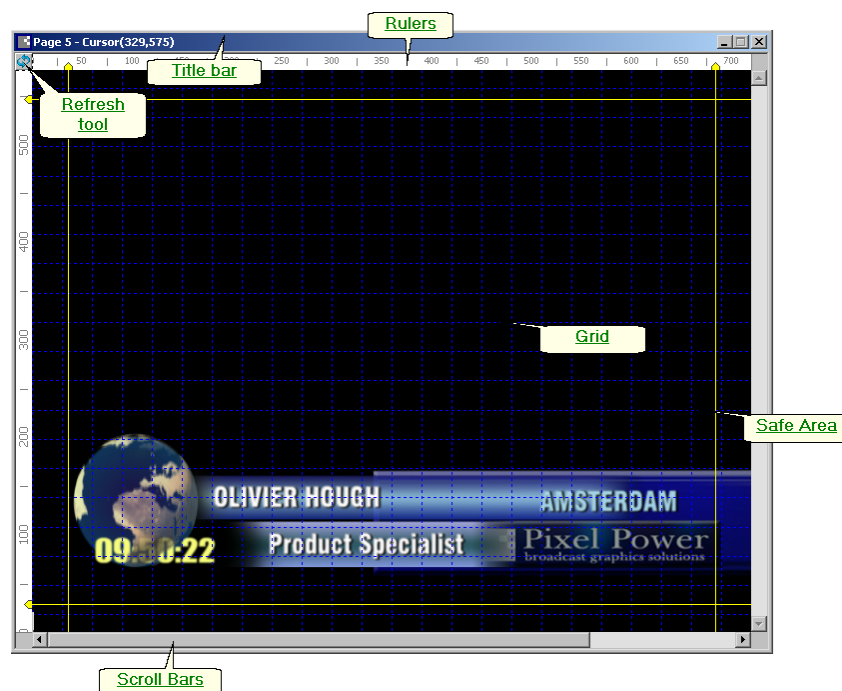
6.10.3.1   Title bar

The title bar displays the following useful information when working within the Graphic Edit window 260:

```
<Page Name> - <Read Only> - <Cursor Coordinates>
```

Page Name

Variables	Examples	Notes
`<Page n>`	Page 1, Page 9999	
`<string from first text page>`	In the news today...	32 character limit.
`<user defined string>`	News Template 213	32 character limit.

Read-Only

If the current page is set to read only (Page> |390|Foreground Options>Read Only |393|) or is configured as template page (Page> |390|Template |394|), then Read Only is shown in the title bar after the page name.

Cursor Coordinates

`<nnn>, <nnn>`

Displays the current cursor x and y position in pixels.

6.10.3.2 Rulers

The Graphic Edit window |260| features a horizontal and vertical ruler. The scale on the rulers is shown pixels and equates to the x and y dimensions of video format (screen area) for the current page being edited.

The rulers serve two purposes,

- it enables visual referencing of the left and right margins when editing a text page and also any tab markers that are configured;
- it enables the exact positioning of page elements.
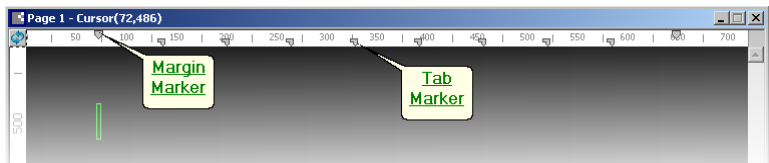
A shortcut menu can be displayed when working with the rulers. Right-click on any area of a ruler to display the following commands:

Command	Description
Format Tabs	Enables configuration of tab stops for the current text page. Displays the Edit Tabs dialog box |627|. A text page must be edited for this command to be available.
Edit Text Margins	Enables configuration of text margins for the current text page. Displays the Edit Text Margins dialog box |628|. A text page must be edited for this command to be available.

6.10.3.2.1 Margin markers

The position of the left and right margins are adjustable using either the Edit Text Margins dialog box |628| or by the dragging margin markers on the horizontal ruler directly using the mouse. New margin settings will affect text that is subsequently typed or subsequent justification operations. Existing text will not be affected unless it is re-justified.

6.10.3.2.2 Tab markers

The software supports up to eight user defined tab stops for each text page. Tabs can be defined as left, centre or right justified or as a decimal tab, with any character used as the decimal alignment character. The tab positions are indicated by grey markers on the horizontal ruler. The eight default tab stops are spaced equally between the left and right margins. This default tab setting can be restored at any time. Tab settings can be edited using either the Edit Tabs dialog box |627| or by dragging tab markers on the horizontal ruler directly using the mouse. If tab stops within text page are entered past the eighth final tab stop, all will be spaced using the distance between the seventh and eighth tab stop.

6.10.3.3 Scroll bars

The Graphic Edit window |260| features a horizontal and vertical scroll bar, thus enabling you to display portions of the current page in the following situations:

- when one or more page elements extend outside the screen area (defined by the video format of the current page);
- when the Graphic Edit window has been resized in conjunction with a magnification setting other than 100%.

NOTE

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

When scrolling, you can also set the Graphic Edit window to scroll the defined safe areas ^{127} as well.

6.10.3.3.1 Toggling the scrolling of safe areas

To toggle the scrolling of safe areas when scrolling pages within the Graphic Edit window ^{260}, follow the steps below:

1. Ensure that the Graphic Edit window ^{260} is displayed (either double-click on a page in the Page Browser ^{251} or select Page> ^{390} Edit Graphics ^{392}.
2. Ensure that no foreground graphics objects are selected by pressing ESC.
3. Select the Safe Area control tab ^{292} on the Graphic Tools ^{266}.
4. Check or clear the Scroll Safe Area box.

If the Scroll Safe Area box is left unchecked, safe area percentages will be maintained when scrolling pages i.e the safe area will move with the scroll.

6.10.3.4 Refresh tool

During editing and manipulation of graphic elements within the Graphic Edit window, you can update the display to ensure that the latest edits are always displayed. To update the display of the page currently being edited in the Graphic Edit window, select the Refresh tool in the top-left hard corner of the Graphic Edit window.

SHIFT + ESC

6.10.3.5 Changing the magnification

Pages shown within the Graphic Edit window ^{260} can be magnified using View> ^{421} Zero Origin, ^{425} View> ^{421} Zoom In ^{425}, View> ^{421} Zoom Out ^{425} and the explicit magnification settings in the View>Zoom ^{421} submenu. These menu functions are also replicated in the Zoom toolbox ^{321} on the Graphic Tools toolbar ^{315}.

NOTE

When magnification is reduced, the size of the Graphic Edit window ^{260} is reduced. You make also need to make use of the scroll bars ^{261} in order to view parts of the page.

6.10.3.6 Docking and floating the Graphic Tools

By default, the Graphic Tools ^{266} are docked to the bottom of the Graphic Edit window ^{260} when pages are opened for editing. This is the preferred way of working as it keeps all available tools easy to hand when working. If desired, you can drag the Graphic Tools temporarily away from the its docked position. The Graphic Tools are re-docked when the Graphic Edit window is subsequently manipulated.

NOTE

If you want to permanently un-dock the Graphic Tools from the Graphic Edit window, you will have to lock the user interface window after un-docking the Graphic Tools. See Locking user interface windows ^{250}.

6.10.3.7 Configuring the look of the Graphic Edit window

The display of safe areas ^{263}, grids ^{262} and key/mattes ^{264} can be configured for the Graphic Edit window ^{260} to suit your preferences when working.

6.10.3.7.1 Configuring and displaying grids

A customized grid can be superimposed with the Graphic Edit window ^{260}. Grids are useful for precise positioning of text and other objects within the current page composition.

Grid can be displayed and settings configured using the Key and Grid Settings control tab ^{285} on the Graphic Tools ^{266}.
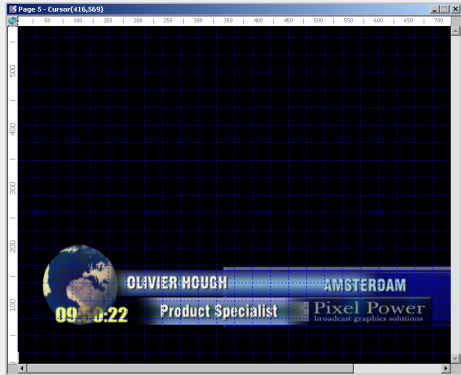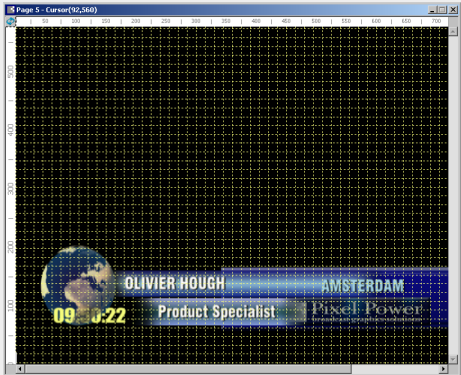
The following grid attributes can be customised:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   262

Copyright © 2000-2006 Pixel Power Ltd.

- horizontal and vertical grid sizes in pixels;
- horizontal and vertical grid origin points, enabling accurate placement of intersections for the current page size/aspect ratio;
- grid locking, enabling page elements to be locked to x an y intersections, x OR y parallels or x AND y parallels;
- grid colour, enabling you to select the best possible contrasting colour to view in conjunction with graphic elements on the page.

Below are two examples of grids with their associated settings:

Default grid settings for 625 line pages	High contrast/accuracy grid settings for 625 line pages
x and y spacing = 30 pixels x origin = 360 pixels y origin = 288 pixels Colour = Blue Locking = None	x and y spacing = 15 pixels x origin = 360 pixels y origin = 288 pixels Colour = Yellow Locking = Follow

NOTE

Grid settings can only be configured when no page elements are selected in the Graphic Edit window.

6.10.3.7.2 Configuring and displaying safe areas

Safe areas can be superimposed within the Graphic Edit window 260, enabling accurate positioning of text and logos for tilting purposes etc. There are three types of area that can be configured and they are explained in subsequent sections. A safe action area, safe title area and 4:3 safe title area can be configured and displayed all at the same time.

Safe areas can be configured using the Safe Areas control tab 292 on the Graphic Tools 266.

The area of picture into which it is considered safe to place material, graphics, text or action, so that it will be viewable when received at home. Initially this was necessary with 4:3 aspect ratio screens as they were always overscanned to avoid showing the black that surrounds the active picture. Typically 5% in from the edges was considered safe. More recently the whole safe area issue has become far more complicated as there are both 4:3 and 16:9 displays, as well as 4:3, 16:9 and sometimes 14:9 (a compromised version of 16:9 that is more acceptable to those viewing on 4:3 screens) aspect ratios for programme output.

In the UK action has been taken to make all commercials so their message is conveyed whichever display aspect is used. The EBU website referenced below provides a very practical reference document as a download.

Website: document R95-2000 at http://www.ebu.ch/tech_texts.html

Here is an example of the Graphic Edit window displaying all default safe areas.
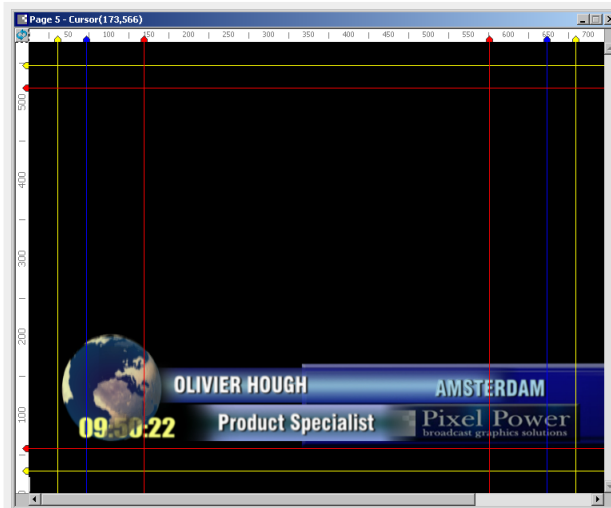
Safe action

Vertical = 90%
Horizontal = 90%
Colour = Yellow

Safe title

Vertical = 80%
Horizontal = 80%
Colour = Blue

4:3 Safe title

Vertical = 80%
Horizontal = 60%
Colour = Red

NOTE

Safe area settings can only be configured when no page elements are selected in the Graphic Edit window.

6.10.3.7.3 Configuring how key/mattes are displayed

The key or matte of any page elements and the background image/clip can be represented/displayed within the Graphic Edit window 260 .

Key/Mattes can be displayed and settings configured using the Key and Grid Settings control tab 285 on the Graphic Tools 266 .

The following key/matte attributes can be customised:

- select whether to display a representation of the key;
- whether this representation is displayed a shaded colour percentage (opaque or transparent) or as a checkerboard background.

Below are two examples of key/mate representation with their associated settings:

Default key/matte settings	Checkerboard key/matte configuration
Shown using shaded colour = Yes Colour = Red Show opacity = Yes Mix = 80 % Show transparency = No Show using checkerboard = No	Shown using shaded colour = No Colour = N/A Show opacity = N/A Mix = N/A Show transparency = N/A Show using checkerboard = Yes

NOTE

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   264

Copyright © 2000-2006 Pixel Power Ltd.

Key/matte settings can only be configured when no page elements are selected in the Graphic Edit window.

6.10.3.8 Saving or rejecting changes made to the current page open for editing

After completing edits to the page currently open in the Graphic Edit window, you can save or reject changes using a number of methods. The page preview in the Page Browser ⌐251¬ is updated in real-time whilst edits are made to the selected page.

With update/revert mode ⌐547¬ turned on:

a) when the page currently open for editing in the Graphic Edit window ⌐260¬ is closed, you are prompted as to whether you want to save any changes made. The following message is displayed:
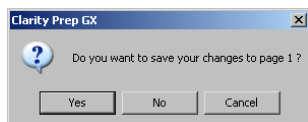
Select OK to accept changes or No to return to the page being edited without saving any changes.

b) to save changes without closing the page for editing, select Page> ⌐390¬Update ⌐394¬ or press the Left CTRL + U key combination.

c) to reject changes, select Page> ⌐390¬Revert ⌐394¬ or press the Left CTRL + R key combination.

With update/revert mode turned off:

a) when the page currently open for editing in the Graphic Edit window ⌐260¬ is closed, edits are saved without prompting.

To select which edit mode the software operates in, use the controls in the Edit dialog tab ⌐810¬ on the User Preferences dialog box ⌐809¬.

If the software is currently operating with edit/revert mode turned on, there are two additional settings that can be configured.

- You can ensure that the current job is saved every time you select to any save changes made to a page after the Graphic Edit window is closed (Save on update check box ⌐812¬).
- Also, when working on a single page job, it is often to required that individual pages are updated to reflect the latest changes before they are taken to air whilst online. Using this option enables an operator to work on individual pages whilst another operator is taking the job to air using a Clarity system unit (Update page before going online check box) ⌐812¬.

NOTE

With update/revert mode ⌐547¬ turned on and whilst a page is open for editing in the Graphic Edit window, if you then edit any attributes of the page being edited using the columns in the Page List ⌐252¬, the CG Tools software requests if you want to copy changes to an edited copy of the page. The following message is displayed:
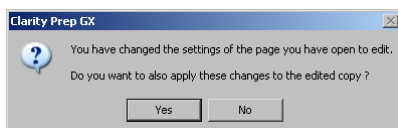
Select OK to apply changes to the edited copy of the page or No to return to the page being edited without saving any changes.

6.10.4 Graphic Tools

The Graphic Tools provide access to all of the controls necessary for graphics creation in the Graphic Edit window 260. The Graphic Tools are split into four distinct areas, as shown below:

Click on a balloon to find out more (online documentation only).
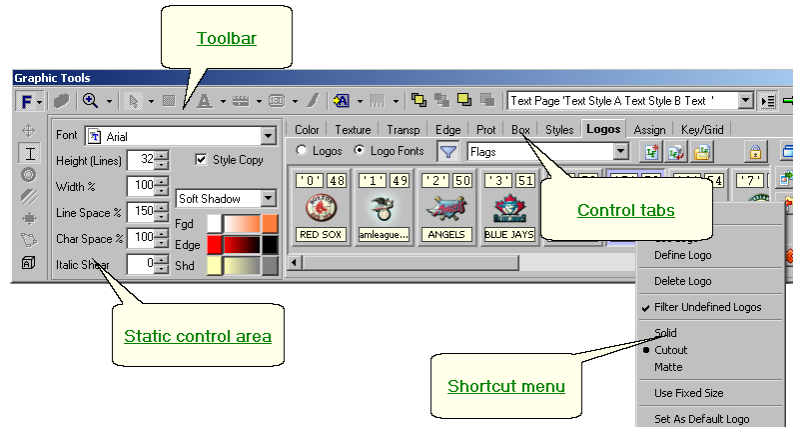
The Graphic Tools are docked to the bottom of the Graphic Edit window 262 by default.

SEE ALSO

Toolbar 315
Static control area 300
Control tabs 266
Shortcut menus 321

6.10.4.1 Control tabs

Control tabs (shown in blue in the picture below) provide access to configuration settings for graphic elements on a context sensitive basis.
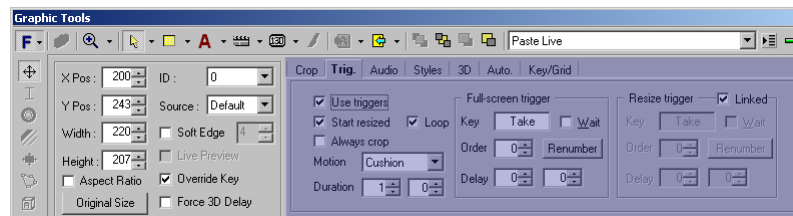
The availability of control tabs changes depending on what is selected or being created in the Graphic Edit window 260. New or edited control tabs since the last release are highlighted with dark grey shading.

Control Tab	Purpose
Actions 268	Enables digital clocks to trigger other animations/elements on the current page when a specific time is reached.
Autobox (Box) 269	Enables text within text pages to be formatted with an autobox.
Automation (Auto.) 270	Enables foreground graphic elements to be associated with a page template field and additionally a global field, enabling the element to be updated by an automation system. Also enables the attachment of the field to Microsoft Visual Basic (VB) scripts, when are subsequently run when the field is updated by an automation system.
Background (Back) 270	Enables the configuration and editing of the matte or key channel of the background image defined on the current page open in the Graphic Edit window.

Control Tab	Purpose
Cel Creation (Creation) 271	Enables the configuration of the first cel image file in a consecutively numbered sequence which can then be compiled into a cel animation for use with the CG Tools software.
Cel and Object Live Surfaces (Live Surfaces) (Assign) 272	Enables the selection and configuration of the selected cels' live surface scaling, offset and filtering settings for each surface. Enables a selected graphic element to be assigned to the surface of a live surface cel animation on the current page open in the Graphic Edit window.
Cel Playback Settings (Cel) 274	Enables the configuration of playback and display settings for the selected cel animation in the Graphic Edit window.
Clip Creation (Creation) 275	Enables the configuration of the first clip image file in a consecutively numbered sequence OR a single video clip of a supported format which can then be compiled into a video clip for use with the CG Tools software.
Clip Playback Settings (Clip) 276	Enables the configuration of playback and display settings for the selected video clip in the Graphic Edit window.
Colour 277	Enables the configuration of colour and shading properties for a selected graphic element or text block within a text page.
Crop 278	Enables the cropping of a cel image before compilation, a pasted cutout picture or live video object.
Date Clock Settings (Clock) 279	Enables the configuration of appearance, type and trigger settings for the selected date clock.
Digital Clock Settings (Clock) 280	Enables the configuration of appearance, type and trigger settings for the selected digital clock.
Edge Effects (Edge) 281	Enables the application and configuration of edge and shadow effects for a selected graphic element or text block within a text page
Field Data Connection Settings (Data) 281	Enables the configuration and editing of data connection settings for a linked global field.
Field Settings (Field) 283	Enables the configuration and editing of simple settings for an inserted or highlighted template field marker within a text page.
Key and Grid Settings (Key/Grid) 285	Enables grid settings and key settings to be configured for the Graphic Edit window.
Logo Fonts (Logos) 287	Enables the creation and editing of logo fonts and subsequent selection of a logo to insert into a text page.
Logo Properties (Logo) 288	Enables the configuration of a highlighted logos' properties within a text page.
Logos (Logos) 289	Enables the definition, editing and insertion of logos.
Paint Settings 290	Enables the configuration of a custom brush profile and related brush image and also enables selection of an image for the textured brush and undo image buffers.
Paste Live Audio (Audio) 291	Enables configuration of how the live audio associated with the selected paste live object is heard during playback and transitional animation (squeezebacks).
Photoshop Image Layer (Layer) 291	Enables the selection of specific layers from the selected Adobe Photoshop cutout image. Also enables the creation of separate cutouts from available layers in the selected cutout.
Rotate 292	Enables graphic objects to be manipulated within a pseudo three dimensional space.
Safe Area (Safe) 292	Enables safe area settings to be configured for the Graphic Edit window. A safe action area, safe title area and 4:3 safe title area can be configured and displayed all at the same time.
Style Protect (Prot.) 293	Enables the protection of different formatting aspects for the currently selected block of text within a text page.
Texture 294	Enables the selection of a texture and configuration of texture mapping for a selected graphic element in the Graphic Edit window.
Transparency (Trans.) 295	Enables the configuration of foreground, edge and shadow plane transparency for a selected page element or text block within a text page.
Triggers (Trig.) 296	Enables configuration of triggering settings for foreground pasted clips and live objects.

Control Tab	Purpose
User Defined Styles (Styles) (Crop Styles) 298	Enables up to 26 user defined styles to be created, stored and applied explicitly by the user and 16 recently used styles to be automatically stored, tracked and listed in order of use during text styling.
View 300	Enables the configuration of how graphic elements are portrayed within the Graphic Edit window in relation to the current edit monitor and monitor displaying the CG output.

6.10.4.1.1   Actions

Only available when a digital clock is selected.

The Actions control tab contains controls which enable digital clocks to trigger other animations/elements on the current page when a specific time is reached.
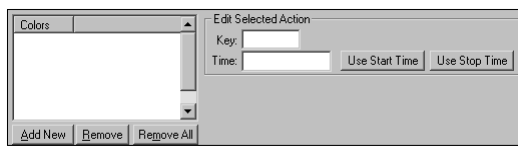
Examples of the use of this feature include:

- triggering another digital clock to start or stop;
- triggering a text animation to start, stop or pause;
- triggering a cel animation to start, stop or pause;
- triggering a foreground pasted clip or paste live object.

<action list box>

Lists trigger actions that selected digital clock will perform.

Column	Description
Trigger key	The trigger key that will be actioned.
Trigger time	The time at which the defined trigger key will be actioned. The time format used will match that of the selected digital clock.

Add New button

Select the Add New button to add a new action to the <action list box>. A default action is added, the settings of which can be subsequently edited using the controls in the Edit Selected Action group box.

Remove button

Select the Remove button to remove the selected action from the <action list box>.

Remove All button

Select the Remove button to remove ALL actions from the <action list box>.

Edit Selected Action group box

Using the Key text box, enter the trigger associated with animations/elements that you want the selected clock to trigger. Trigger keys are associated with text animations using the Key text box 584 in the Trigger group box 583 on the Animation Marker dialog box 565. Using the Time text box, enter the time at which the defined trigger key will be actioned. If desired, using the Use Start Time and Use Stop Time buttons, you can import the configured start time or stop time 280 if the selected digital clock is a Stopwatch or Global Stopwatch clock type.

SEE ALSO

Digital Clock Settings (Clock) 280

6.10.4.1.2 Autobox (Box)

The Autobox control tab contains controls which enable text within text pages to be formatted with an autobox. For more information on autoboxing, see Autoboxing text 448.
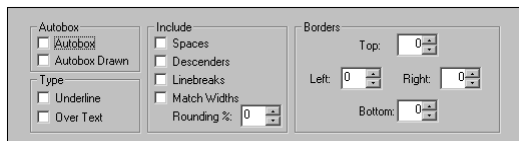
Autobox group box

Check the Autobox box to enable autoboxing for the current text style.

Whilst editing text, the display of automatic boxes can be turned on or off. Check the Autobox Drawn box to display autoboxes whilst editing text.

Whilst editing text, the software will attempt to update the rectangular box(es) as the text is being entered. If the box has an edge style or texture, the updating of the box may become slow.

When editing large automatic boxes, we recommended that boxes are not displayed whilst editing text.

Occasionally, whilst editing text, an automatic box will be drawn incorrectly. This will be drawn correctly when the edit is complete. When editing a text page in the foreground, the boxes will also be refreshed if the foreground layer is panned.

Type group box

Automatic boxes can be used to underline text. Check the Underline box to ensure that autoboxing appears as a underline.

The automatic box can be drawn either underneath or over the top of the text. Ensure that the Over Text box is cleared to enable autoboxing underneath text or check the Over Text box to enable autoboxing over the top of text.

Include group box

As well as normal characters, automatic boxing can be applied to spaces and tabs. Check the Spaces box to apply automatic boxing to white space characters.

The bottom border of the automatic box can be measured either from the base line of the character or from the bottom of the characters' descender. To define the bottom border from the character base line, clear the Descenders box. To define the bottom border from the bottom of the drawn character including descenders, check the Descenders box.

Where an automatic box is being used to surround multiple lines of text, the box can surround either the whole block or individual lines of text. To surround multiple lines of text with an automatic box, clear the Linebreaks box. To surround individual lines of text with an automatic box, check the Linebreaks box. If the Line Break box remains cleared, ensure line spacing is sufficient to prevent boxes overlapping.

Where an automatic box is being used for multiple lines of text with line breaks, the box width can either be set by the length of an individual line or by the longest of the multiple lines. To set the automatic box width to the length of an individual line, ensure that the Match Widths box is cleared. To set the box width to the length of the longest line, check the Match Widths box.

If a rounded end is required for an autobox effect, enter the required percentage of the corner radius in the Rounded % increment box. For example, a value of 100% equates to a radius half the height of the autobox i.e. a full rounded line end.

Borders group box

The size of the rectangular box is defined in pixels as a top, bottom, left and right border. This border is defined as a distance in pixels from the edge of the character. To set the automatic box border size, adjust the numeric values in the Left, Right, Top and Bottom increment boxes.

Note that the border controls define the distance to the edge of the drawn box, which will include any edge effect or shadow. Depending on the character spacing and the kerning within a particular font, the left and right borders may need to be greater than zero in order to ensure that the automatic boxes for each character join up.

When defining an underline using the increment boxes in the Borders group box of the Autobox control tab, the Top

increment box is used to define the distance in pixels of the underline below the text and the Bottom increment box being used to define the depth of the underline in pixels.

SEE ALSO

Autoboxing text 448

6.10.4.1.3   Automation (Auto.)

Enables foreground graphic elements to be associated with a page template field and additionally a global field, enabling the element to be updated by an automation system. Also enables the attachment of the field to Microsoft Visual Basic (.VBS) scripts, when are subsequently run when the field is updated by an automation system.
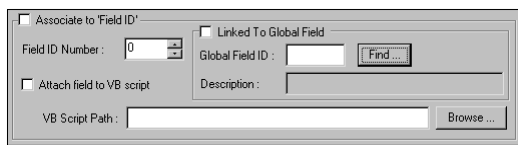
Associate to 'Field ID' check box and group box

Check the Associate to 'Field ID' box to associate the selected graphic element to a page template field.

Select the desired page template field ID using the Field ID Number increment box.

To attach the specified field to a VB script, check the Attach field to VB script box and enter the path and file name of the VB script in the VB Script Path text box. Alternatively, select the Browse button to browse the local or network file system and select a VB script file.

Linked To Global Field check box and group box

Check the Linked To Global Field box to link the selected page template field to a global field.

Enter the global field that you want to link to using the Global Field ID text box. If you are unsure of which you global field you want to link to, select Find to display the Global Fields Manager control 333 where you can select a global field. With a global field selected, its' description is shown in the Description text box.

6.10.4.1.4   Background (Back)

Enables the configuration and editing of the matte or key channel of the background image defined on the current page open in the Graphic Edit window 260 .
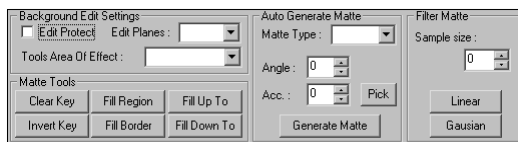
Background Edit Settings group box

Check the Protect Background check box to enable the matte channel to be used as a mask to protect underlying image areas from any further image processing.

When working in the background of a page, the Edit Plane drop-down list box determines which planes of the image will be affected by any paint brushes or image filters. Selecting a brush tool and working in the RGBK planes will cause the brush to draw its strokes into the image and the matte. Selecting the RGB plane draws into the image only. Selecting the K Plus or K Minus planes will add or remove brush strokes from the matte channel.

Select the area of the background image that will be affected by the matte or key channel changes using the Tools Area Of Effect drop-down list box.

Matte Tools group box

Select the Clear Key button to clear the current matte or key channel associated with the current page background image.

Select the Invert Key button to invert the current matte or key channel associated with the current page background

image.

Select the Fill Region button to fill a region of the current page background image using the current matte settings. The Paint Instructions prompt appears giving instructions on what to do. Move the mouse point over a point inside the desired region, then press the left mouse button to select it.

Select the Fill Border button to fill the border outside a region of the current page background image using the current matte settings. The Paint Instructions prompt appears giving instructions on what to do. Move the mouse point over a point inside the desired region, then press the left mouse button to select it.

Auto Generate Matte group box

Provides access to functions that configure and operate the three software based automatic matte creation tools.

Select the desired matte type using the Matte Type drop-down list box:

- Chroma enables matte creation on the basis of colour, including both colour angle (hue) and saturation.
- Hue enables matte creation on the basis of colour angle (hue) only, with no selectivity based upon saturation.
- Luma enables matte creation on the basis of <u>luminance</u> |1130| values (brightness).

If Chroma or Hue was selected as the matte type, select the chrominance or hue angle of the matte using the Angle increment box. Select the chrominance or hue acceptance of the matte using the Acc increment box. Alternatively, select the Pick button and select required angle and acceptance values from colours in the picture. The Paint Instructions prompt appears giving instructions on what to do. Move the mouse pointer over a point on the background image to select an angle value and press the left mouse button to select it; then move the mouse pointer over a point on the background image to select an acceptance value and press the left mouse button to select it.

If Luma was selected as the matte type, select the minimum luminance value of the matte using the Min increment box. Select the maximum luminance value of the matte using the Min increment box. Alternatively, select the Pick button and select required luminance values from colours in the picture. The Paint Instructions prompt appears giving instructions on what to do. Move the mouse pointer over a point on the background image to select a minimum value and press the left mouse button to select it; then move the mouse pointer over a point on the background image to select a maximum value and press the left mouse button to select it.

Click on Generate Matte to create a matte for the current background image using the current matte settings.

Filter Matte group box

Enables filtering the key channel over part or all of the current picture background. This is useful for softening a key or reducing the effect of source picture noise in a processed luminance, chrominance or hue key. The size and type of filter kernel can be selected.

Select the sample size of the filter kernel (2 to 20) using the Filter Size increment box.

Select the Linear button to select a linear profile key filter. The linear filter kernel removes high frequencies at the expense of introducing blurriness.

Select the Gaussian button to select a linear profile key filter. The gaussian filter kernel also removes high frequencies but does not cause as much blurring of the key.

6.10.4.1.5 Cel Creation (Creation)

Enables the configuration of the first cel image file in a consecutively numbered sequence which can then be compiled into a cel animation for use with the CG Tools software. Control over position, aspect ratio and cel compilation is achieved using the <u>Cel control set</u> |303| on the <u>Graphic Tools</u> |266|.
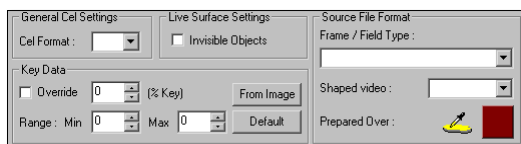
This control tab is displayed when the first cel image file in a consecutively numbered sequence inserted using the Create Cel Animation tool from the <u>Cel and Clip toolbox</u> |317| on the <u>Graphic Tools</u> |266| toolbar.

General Cel Settings group box

Use the Cel Format drop-down list box `(4444, 4224)` to select the YUV sampling type.

The YUV sampling type can be selected dependant on whether you require the compiled cel to occupy less disk space and bandwidth (4:2:2:4), thus enabling full screen playout at SD resolutions; or have maximum quality at the expense of increased disk space and bandwidth (4:4:4:4).

Live Surface Settings group box

If creating a cel animation from a sequence of .RPF images exported from Autodesk® 3ds Max® and the images only contain the 3D transformation data and not the objects, ensure that the Invisible Objects box is checked.

Key Data group box

To override the stored key data, thus ignoring the key data stored on every frame throughout the image sequence and applying a single value throughout the cel animation, check the Override box. In the adjacent % Key increment box (0 to 100), type in the required key value as a percentage.

To define the key range (0 to 255) that will be used for every frame when the cel animation is compiled, enter the desired value within the Min and Max increment boxes.

Select the From Image button to copy the original key values stored with the current display frame.

Select the Default button to revert back to the default key values used by the software.

Source File Format group box

Using the Frame/Field Type drop-down list box, select how fields or frames are stored in the cel animation. The person that created the image sequence should know the correct setting to use. Also refer to the documentation supplied with your cel animation export software e.g. Autodesk® 3ds Max®.

Type	Description
Progressive Images at Field Rate	Each frame contains two full images enabling positioning on any scan line to ensure maximum quality. Uses more disk space.
Progressive Images at Frame Rate	Each frame contains one full image enabling positioning on any scan line. Playback is less smooth due to half as many images. Uses less disk space.
Interlaced Image - Lower Field First	Each frame contains two alternate half screen images with the lower field image shown first. Good quality but must be positioned on the correct scan line.
Interlaced Image - Upper Field First	Each frame contains two alternate half screen images with the upper field image shown first. Good quality but must be positioned on the correct scan line.

The software utilises the additive method of keying when displaying compiled cel animations. Using the Shaped Video drop-down list box, select whether the image sequence has the key data factored into the image colour data. As a guide, the if the starting cel appears with hard edges or without any transparency in areas where you would expect it, this usually means that the key data has not been factored into the image.

If the selected starting cel does not have the key data factored into the image colour data, you will have to enable the software to do this during compilation. Select No from the Shaped Video drop-down list box and then click on the adjacent colour selection box to display the Colour Selection dialog box 599 where you can select the colour over which the cel was prepared/created.

If you know that the image sequence has the key data factored into the image colour data, select Yes from the Shaped Video drop-down list box. If you are unsure whether the starting cel does not have the key data factored into the image colour data, select Auto Detect from the Shaped Video drop-down list box.

6.10.4.1.6   Cel and Object Live Surfaces (Live Surfaces) (Assign)

This control tab is displayed in two different circumstances, but features almost the same identical user interface. Differences are highlighted where relevant.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   272

Copyright © 2000-2006 Pixel Power Ltd.
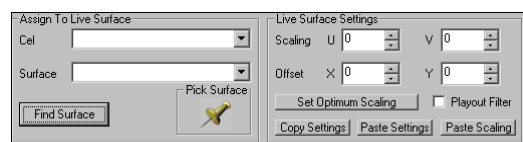
In the first circumstance, it is displayed after:

a) creating a cel animation from an .RPF file sequence that was exported from Autodesk® 3ds Max®;
b) importing a compiled .CEL animation featuring live surfaces;
c) selecting a compiled .CEL animation featuring live surfaces within the <u>Graphic Edit window</u> 260.

In this situation the control tab is labelled Live Surfaces and enables the selection and configuration of the selected cels' live surface scaling, offset and filtering settings for each surface.

In the second circumstance, the control tab is labelled Assign and is available for selection whenever a graphic element is selected in the Graphic Edit window. In this situation it enables a selected graphic element to be assigned to the surface of a live surface cel animation present on the current page open in the Graphic Edit window and then enables the configuration of the selected live surfaces' scaling, offset and filtering settings.

Changes made to the settings in the Live Surface Settings group box are enforced between the two control tab states.

Assign To Live Surface group box

Use the Cel drop-down list box to select a live surface cel animation available on the current page. This drop-down list box is only available when the Assign control tab is selected in conjunction with a selected graphic element in the Graphic Edit window.

Use the Surface drop-down list box to select a live surface to configure on the selected cel animation from those available. The selected live surface is highlighted on the selected live cel in the Graphic Edit window. If the selected live surface is not highlighted, is may be hidden from view. Use the Find Surface button to display it. Live surfaces are listed alphabetically within the Surface drop-down list box. You can also use the Pick Surface pointer to select a live surface.

Use the Find Surface button if the selected live surface is not visible on the live cel animation shown in the Graphic Edit window. The cel animations' display frame is changed so the selected live surface can be viewed, enabling graphic element positioning.

Use the Pick Surface pointer to select a live surface on the selected cel animation. Position the mouse cursor over the pointer, then click + hold the left mouse button. Drag the pointer over the selected live cel animation and position the pointer over the area where you think that a live surface may exist, then release the left mouse button to select it. If a live surface is present in the selected area then it will be selected and shown in the Surface drop-down list box.

Live Surface Settings group box

The controls in the Live Surface Settings group box enable the configuration of how graphic elements are scaled into the selected live surface. Remember that changes made to the settings in the Live Surface Settings group box are enforced between the two control tab states (Live Surfaces and Assign).

These settings affect the parameters enforced by the *Live Surface Edit Box* for the selected live surface.

The Scaling and Offset settings can be configured interactively using the mouse if desired by positioning (OFFSET) and resizing (SCALING) the Live Surface Edit Box.
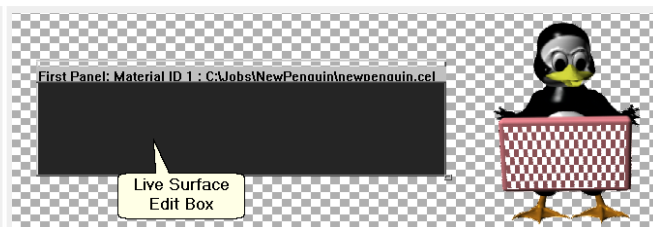
Using the Scaling X and Y increment boxes, edit the x and y scaling for the selected live surface. The default values shown are those saved with the live surface cel animation when it was exported from Autodesk® 3ds Max®. Default scaling values are assigned when the live cel animation is compiled within the CG Tools software from the .RPF image sequence exported from Autodesk® 3ds Max®. X and Y scaling values for each surface are calculated as an average over the entire length of the animation, ensuring flexibility in terms of mapped image appearance on each face over the length of the animation.

To ensure optimum surface scaling for the selected surface as it appears in the current display frame, select the Set Optimum Scaling button.

Using the Offset X and Y increment boxes, edit the x and y offset for the selected live surface. Controls the placement offset of an object on the selected live surface.

Check the Playout Filter box to improve the rendering quality of the selected surface. It should be used in situations where mapped graphic elements are resized or have perspective applied to them. When the playout filter is turned on, there is a small performance overhead that may affect animation performance in certain circumstances.

To copy the current scaling, offset and playout filter settings from the selected live surface, select the Copy Settings button.

To paste live surface settings that have been copied from a selected surface, select either the Paste Settings button to paste scaling, offset and playout filter settings or the Paste Scaling button to paste just paste scaling and offset settings. This is very useful to maintain alignment across multiple surfaces/objects that have identical geometry e.g. a scoreboard.

SEE ALSO

6.10.4.1.7   Cel Playback Settings (Cel)

Enables the configuration of playback and display settings for the selected cel animation in the Graphic Edit window [260].

This control tab is displayed when either :

- the first cel image file in a consecutively numbered sequence has been inserted using the Create Cel Animation tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar and then subsequently compiled using the controls on the Cel control set [303];
- a compiled cel animation has been inserted using the Insert Cel Animation tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar.

Frames group box

The YUV sampling type of the selected cel animation is displayed using the Format control. This setting is configured when a cel animation is compiled. See the Cel Creation control tab [271] for more information.

Using the Frame/Field Type drop-down list box, select how fields or frames are stored in the cel animation to ensure correct playback. The person that created the cel sequence should know the correct setting to use. This setting is also configured when a cel animation is compiled. See the Cel Creation control tab [271] for more information.

Type	Description
Prog. Field Rate	Each frame contains two full images enabling positioning on any scan line to ensure maximum quality. Uses more disk space.
Prog. Frame Rate	Each frame contains one full image enabling positioning on any scan line. Cel playback is less smooth due to half as many images. Uses less disk space.
Inter. Lower Field First	Each frame contains two alternate half screen images with the lower field image shown first. Good quality but must be positioned on the correct scan line.
Inter. Upper Field First	Each frame contains two alternate half screen images with the upper field image shown first. Good quality but must be positioned on the correct scan line.
Unknown	Select this option if you do not know the settings used when the cel animation was compiled.

The number of frames in the selected cel animation is shown in the Number of Frames increment box. This is not editable after the cel has been compiled.

Some cel animations may contain empty frames at the start which makes placement within the Graphic Edit window difficult. Using the Display Frame increment box, select a different frame that is displayed whilst the compiled cel animation is shown within the Graphic Edit window.

Playout group box

The playout mode can be set using the Mode drop-down list box. The options available are as follows:

Mode	Description
One Shot	Play cel animation once only.
Loop	Loop cel animation until next page is taken.
Ping Pong	Loop cel animation continuously until next page is taken whilst alternating the direction of playout after completion of each cycle.
Reverse One Shot	Play cel animation in reverse once only.
Reverse Loop	Loop cel animation in reverse until next page is taken.
Reverse Pin Pong	Loop cel animation continuously until next page is taken whilst alternating the direction of playout after completion of each cycle. First cycle is reversed.

Using the Over Pages increment box, configure the selected cel animation to playout over a set number of pages starting from the current page.

To start the cel animation when the page is taken, clear the Start Wait box and adjacent Delay increment box. To start the cel animation after the page has been taken and animation has started on previous foreground layers, check the Start Wait box and clear the adjacent Delay increment box. To start the cel animation after the page has been taken and after a specified subsequent delay has elapsed, clear the Start Wait box and using the adjacent Delay increment box, enter the required number of seconds and/or frames.

To stop the cel animation when the page is stopped or the next page in the list or stack is taken, clear the Stop Wait box and adjacent Delay increment box. To stop the cel animation after animation has stopped on previous foreground layers, check the Stop Wait box and clear the adjacent Delay increment box. To stop the cel animation after a specified delay has elapsed, clear the Stop Wait box and using the adjacent Delay increment box, enter the required number of seconds and/or frames.

The speed at which a cel animation can play out each frame can be delayed by a set number of fields. This enables slower than real time (50 fields per second for 625 line) playout. Using the Play Field Delay increment box, enter number of fields between each frame in the range 2 (real time) to 20 (1/50th speed).

Use the Trigger key text box to select the desired trigger key on the keyboard to start and stop the selected cel animation.

Use the Keying drop-down list box to select the type of keying for the selected cel animation:

Mode	Description
Multiplicative	Multiplicative keying (sometimes referred to as full blend keying) involves cutting a hole in the background and adding the foreground video scaled by the key value. This produces a correct result if the video is at full intensity where the key is transparent. Multiplicative keying should be used where the source material for the floating cutout cel has full intensity video with the shape of the cel defined just in the key.
Additive	Additive keying (sometimes referred to as half blend or matte keying) involves cutting a hole in the background and adding the foreground video. This only produces a correct result if the foreground has already been scaled by the key, for example by rendering over black. If the foreground has not been created in this manner the edge softness and anti-aliasing effect of the key will be lost. Additive keying should be used where the source material for the floating cutout cel has been rendered over black.

To configure advanced cel animation playback attributes (timeline based), select the Advanced Loop/Pause button. The Cel Animation\Video Clip Playout dialog box 587 is displayed where you can configure cel playback attributes.

6.10.4.1.8   Clip Creation (Creation)

Enables the configuration of the first clip image file in a consecutively numbered sequence OR a single video clip of a supported format which can then be compiled into a video clip for use with the CG Tools software. Control over position, aspect ratio and clip compilation is achieved using the Cel and Clip control set 303 on the Graphic Tools.
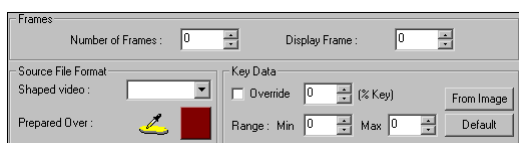
This control tab is displayed when the first clip image file in a consecutively numbered sequence or a video clip is inserted using the Create Video Clip tool from the Cel and Clip toolbox 317 on the Graphic Tools 266 toolbar.

Video clips can be compiled to a local clip drive (Clarity) or local hard disk (Clarity PREP). If video clips are compiled to the local hard disk (when using Clarity PREP for instance) they can then be copied using FTP to a clip drive hosted on a Clarity system. Video clips cannot be compiled directly to a remote clips store hosted on a Clarity system.

Frames group box

The number of frames available in the selected image sequence is shown in the Number of Frames increment box. To reduce the number of frames that will be included in the compiled video clip, reduce the value in the Number of Frames increment box.

By default, the first frame in the selected image sequence is assigned is the display frame when the video in shown in the Clarity Explorer. Some image sequences may contain empty frames at the start which makes identifying a compiled video clip difficult. Using the Display Frame increment box, select a different frame that is displayed in the Clarity Explorer when selecting a video clip.

Key Data group box

To override the stored key data, thus ignoring the key data stored on every frame throughout the image sequence and applying a single value throughout the clip, check the Override box. In the adjacent % Key increment box `(0 to 100)` , type in the required key value as a percentage.

To define the key range `(0 to 255)` that will be used for every frame when the video clip is compiled, enter the desired value within the Min and Max increment boxes.

Select the From Image button to copy the original key values stored with the current display frame.

Select the Default button to revert back to the default key values used by the software.

Source File Format group box

The software utilises the additive method of keying when displaying compiled video clips. Using the Shaped Video drop-down list box, select whether the image sequence has the key data factored into the image colour data. As a guide, the if the starting image appears with hard edges or without any transparency in areas where you would expect it, this usually means that the key data has not been factored into the image.

If the selected starting image does not have the key data factored into the image colour data, you will have to enable the software to do this during compilation. Select No from the Shaped Video drop-down list box and then select the adjacent colour selection box to display the Colour Selection dialog box 599 where you can select the colour over which the video was prepared/created.

If you know that the image sequence has the key data factored into the image colour data, select Yes from the Shaped Video drop-down list box. If you are unsure whether the starting image does not have the key data factored into the image colour data, select Auto Detect from the Shaped Video drop-down list box.

6.10.4.1.9 Clip Playback Settings (Clip)

Enables the configuration of playback and display settings for the selected video clip in the Graphic Edit window 266.
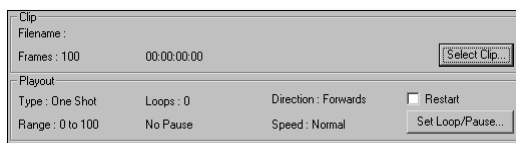
This control tab is displayed when either:

- the first clip image file in a consecutively numbered sequence has been inserted using the Create Video Clip tool from the Cel and Clip toolbox 317 on the Graphic Tools 266 toolbar and then subsequently compiled using the controls on the Cel and Clip control set 303;
- a compiled video clip has been inserted using the Paste Clip tool from the Cel and Clip toolbox 317 on the Graphic Tools 266 toolbar.

Clip group box

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   276

Copyright © 2000-2006 Pixel Power Ltd.

Displays location and duration information about the currently selected video clip.

Control	Description
Filename	The path and filename of the currently selected video clip on the local clip drive or local hard disk e.g:
Frames	The number of frames in the clip and length of the video clip in HH:MM:SS:FF.

To replace the selected video clip with another, select Select Clip. The Clarity Explorer [362] is displayed where you can select an alternative clip.

Playout group box

Displays playout information about the currently selected video clip.

Control	Description	Variables
Type	Clip playout type	`One Shot, Loop, Ping Pong`
Range	Selected number of frames within the clip that are defined to play out	`n to n`
Loop	If configured, the number of times or how the clip will loop during playback	`n, Until end of Animation, Infinite`
Pause	If configured, the frame number at which the clip will pause	`No Pause, Pause at frame n`
Direction	Playback direction	`Forwards, Reversed`
Speed	Playback speed as a percentage of normal playback speed (100%)	`Normal (100%), nnn%`

In situations where the same clip is inserted on consecutive pages, by default the software will maintain playback of the clip during the playout of the pages to ensure seamless video. If you want each instance of the clip to restart, check the Restart box to restart the clip every time the page containing the clip is taken.

To configure video clip playback attributes, select the Set Loop/Pause button. The Cel Animation\Video Clip Playout dialog box [587] is displayed where you can configure clip playback attributes.

6.10.4.1.10   Colour

The Colour control tab enables the configuration of colour and shading properties for a selected graphic element or text block within a text page.
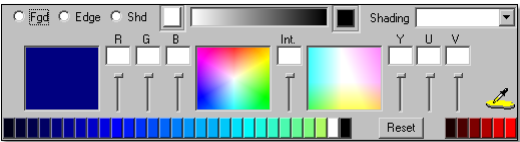
Three different colour spaces are provided for creating colours.

- The native colour space for the Clarity hardware is YUV and therefore YUV values are the most 'natural' values to be used by the software.
- RGB (Red, Green and Blue) values are also available. These are included as it is easier for users to create and manage colours within an RGB colour space. RGB values are mapped to their equivalent YUV values.
- Finally, a colour can be defined in terms of its Hue, Lightness (intensity) and Saturation (HLS). This is a more natural way for an artist to specify colour.

Colours can be defined using the following controls:

- RGB (Red, Green and Blue) using an interactive palette or slider bar group and related input boxes;
- HLS (Hue, Lightness and Saturation) using an interactive palette or intensity slider bar and related input box;
- YUV using slider bar group and related inputs boxes.
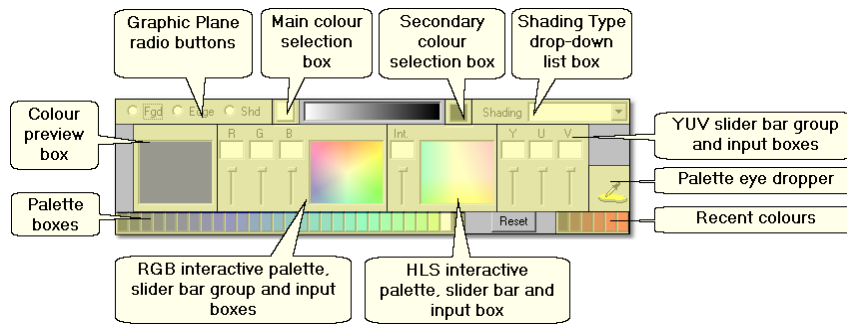
Control	Description
Colour preview box	Displays the current colour.
RGB interactive palette, slider bar group and input boxes	Enables the selection of an RGB colour. Either • click anywhere within an RGB interactive palette; • enter a value in any of the RGB input boxes; • using the mouse or pen, drag the RGB slider bars.
YUV slider bar group and input boxes	Enables the selection of an YUV colour. Either • enter a value in any of the YUV input boxes; • using the mouse or pen, drag the YUV slider bars.
Palette eye dropper	Enables the selection of a colour from anywhere on the screen. Position the pointer over the palette eye dropper, then click + hold. Drag the pointer around the screen until the colour preview box displays the required colour, then release the left mouse button.
Palette boxes	Enable the selection of a colour from the pre-defined palette.
HLS interactive palette, slider bar and input box	Enables the selection of an HLS colour. Either • click anywhere within an interactive palette; • enter a value in the HLS Int. input box.
Recent colours	Displays the last six recently defined colours.
Shading Type drop-down list box	Enables the selection of the desired shading type [499] for the selected graphic plane.
Secondary colour selection box	Work with the Secondary colour for the selected graphic plane. Define a Secondary colour by selecting a colour from the palette boxes or recent colours or define a new colour using the RGB, YUV or HLS controls.
Main colour selection box	Work with the Main colour for the selected graphic plane. Define a Main colour by selecting a colour from the palette boxes or recent colours or define a new colour using the RGB, YUV or HLS controls.
Graphic Plane radio buttons	Enables selection of the Foreground, Edge or Shadow plane [498] for the selected graphic element. Subsequently select a shading type and whether to work with the Main or Secondary colour.

6.10.4.1.11   Crop

Enables the cropping of a cel image before compilation, a pasted cutout picture or live video object.

The following version of the Crop control tab is displayed:

• when a live object is inserted using the Paste Live tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar;
• when an existing pasted live object is selected within the Graphic Edit window.
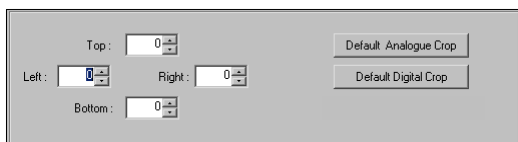
The following version of the Crop control tab is displayed:

- when the first cel image file in a consecutively numbered sequence has been inserted using the Create Cel Animation tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar;
- when a cutout is inserted using the Cutout tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar or an existing cutout is selected in the Graphic Edit window;
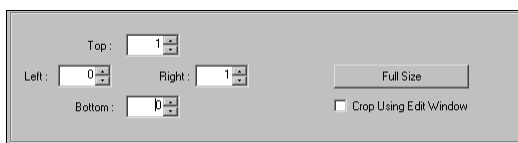
Left, Right, Top and Bottom increment boxes

Use the Left, Right Top and Bottom increment boxes to configure the cropping manually for the selected image, cutout or paste live object. When compiling a cel animation, the resulting crop settings are carried forth throughout the image sequence.

Full Size button

Select the Full Size button to ensure that the selected cutout or first cel image file in a consecutively numbered sequence is shown as a relative full screen representation within the confines of the height and width values set on the Cel and Clip control set [303] or Cutout control set [305]. When compiling a cel animation, this setting is carried forth throughout the image sequence.

Crop Using Edit Window check box

Check the Crop Using Edit Window box to define a cropping area interactively by manipulating editing handles using the mouse. As the handles are adjusted, the values in the Left, Right, Top and Bottom increment boxes adjust accordingly. When compiling a cel animation, the resulting crop settings are carried forth throughout the image sequence.

Default Analogue Crop button

When a paste live object is selected, select the Default Analogue Crop button to crop the object horizontally by nine pixels each side. This ensures that the analogue blanking lines are not seen when the video is resized horizontally during a squeezeback effect.

This is the default setting when a live object is pasted onto page. Depending on your video source, you may have to adjust the Left and Right values to get the desired effect.

Default Digital Crop button

When paste live object is selected, select the Default Digital Crop button to ensure that the full available digital picture is displayed when the object is played out either at full screen or when it is resized during a squeezeback effect.

6.10.4.1.12   Date Clock Settings (Clock)

Enable the configuration of appearance, type and trigger settings for the selected date clock.
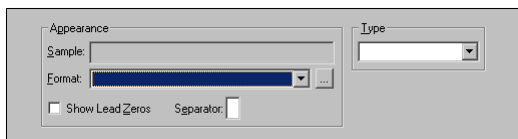
Appearance group box

Use the Format drop-down list box to select a predefined format for the date clock. If the available formats do not suit

279   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

your requirements, you can create a new format.

To create a new format, select the browse button adjacent to the Format drop-down list box. The Edit Format String dialog box 623 is displayed.

Check the Show Lead Zeros box to display leading zeros. The leading zero will be displayed whilst editing the clock, whether or not the Show Lead Zeros box is checked.

Use the Separator input box to define a character to be used as the field separator.

Type group box

Select the type of date clock 494 from the Type drop-down list box.

6.10.4.1.13   Digital Clock Settings (Clock)

Enables the configuration of appearance, type and trigger settings for the selected digital clock. The availability of controls is dependant on the selections made as such the picture below does NOT show all available controls.
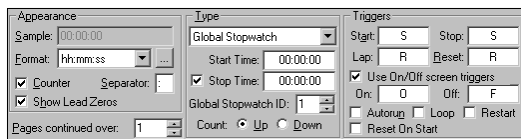
Appearance group box

Use the Format drop-down list box to select a predefined format for the digital clock. If the available formats do not suit your requirements, you can create a new format. If no format is specified, the digital clock will default to seconds.

To create a new format, select the browse button adjacent to the Format drop-down list box. The Edit Format String dialog box 623 is displayed.

Check the Counter box to enable counter mode. Use the Digits increment box on the Edit Format String dialog box 623 to configure counter mode. With the Counter box checked, the left-most clock field will be limited only by the specified number of digits. For example, if minutes and seconds are displayed without the counter mode, the minutes will count up to 59 and reset to 0, but with a 3-digit counter, they will go up to 999 before resetting.

Check the Show Lead Zeros box to display leading zeros. The leading zero will be displayed whilst editing the clock, whether or not the Show Lead Zeros box is checked.

Use the Separator input box to define a character to be used as the field separator.

Pages Continued Over increment box

When a Global Stopwatch type is selected, the Pages Continued Over increment box can be used to display the clock continuously for more than one page. Specifying a value of 0 will display the stopwatch on all pages following the current one. Once a multi-page stopwatch is pasted down, it can be edited from any of the pages on which it will run. Only one multi-page stopwatch can be used per page.

Type group box

Select the type of digital clock 495 from the Type drop-down list box.

If you have selected a Stopwatch or Global Stopwatch clock type, use the Up or Down radio buttons to configure the count direction.

If you have selected a Slave to Timecode digital clock type, the Timecode Source drop-down list box is used to select the timecode source for the selected digital clock. The available timecode sources are the same as those found in the Default Timecode Source drop-down list boxes 734 on the Timecode/VTR dialog tab 732 on the User Preferences dialog box 809.

If you have selected an Internal digital clock type, the Timecode Source drop-down list box is replaced by the Time Zone Offset controls. Use the Hours and Minutes increment boxes to configure an offset for the current clock to match your desired time zone.

If you have selected a Stopwatch or Global Stopwatch clock type, the Timecode Source drop-down list box is replaced by the Start Time text box and the Stop Time check box and adjacent text box. Use the Start Time box to specify a starting time for the stopwatch. If you want to specify an end time for the stopwatch, check the Stop Time box and

specify a stop time using the adjacent text box.

If you have selected a Global Stopwatch digital clock type, the Global Stopwatch ID increment box is also shown in addition to the Start Time text box and the Stop Time check box and adjacent text box. Use the Global Stopwatch ID increment box to configure an ID for the current clock. When two global stopwatches are present for example on adjacent pages, and they both have the same ID, they can have same time source (i.e. they will act as a single instance in terms of triggering and counting etc.) but they can have individual formatting characteristics and positions defined. This is an alternative to defining a clock with the Page Continued Over setting configured, as it enables more control over triggering, formatting and positioning.

Triggers group box

Enables the configuration of how a digital clock type is triggered to start, stop or be reset. The keys assigned using the Start/Stop, Reset/Lap, On and Off input boxes are case insensitive.

Use the Start and Stop input boxes to define respective characters that will be used to start and stop a Stopwatch digital clock or Global Stopwatch digital clock. Use the Reset and Lap input boxes to define respective characters that will be used to lap time and reset a Stopwatch digital clock or Global Stopwatch digital clock.

Check the Use On/Off screen triggers box the enable the triggering of the display of all digital clock types whilst online. Use the On input box to define the character to be used to display the digital clock. Use the Off input box to define the character to be used to hide the digital clock from display. It is important to note that at present, only a Cut transformation is performed when the display is toggled.

Check the Auto Run box if the Stopwatch digital clock or Global Stopwatch digital clock is to start running as soon as the page is taken to the Program output. If a Stopwatch digital clock or Global Stopwatch digital clock is configured to auto run and is counting down, the page will be exited when 0 is reached. Clear the Auto Run box if the clock should be displayed until the page is aborted by pressing the Undo or Online keys.

If you have selected a Stopwatch or Global Stopwatch digital clock type, the Loop check box enables the selected clock to loop. Check the Loop box to ensure that the currently selected clock loops back to its defined start time when the end time is reached or when 0 is reached if the clock is set to count down.

If you have selected a Global Stopwatch digital clock type, the Restart box enables the selected clock to restart when it is encountered during playout. Check the Restart box to ensure that the currently selected digital clock is restarted when it is encountered during playout.

Check the Reset On Start box if the selected digital clock is to be reset when it is started.

SEE ALSO

6.10.4.1.14   Edge Effects (Edge)

The Edge Effects control tab enables the application of edge and shadow effects to a selected graphic element or text block within a text page. Edge effect parameters can also be set before page elements are drawn or text is typed. Resulting page elements and text will use the parameters.
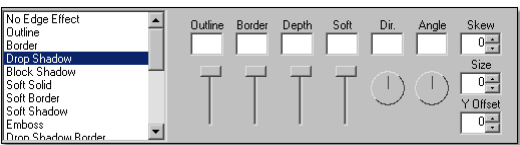
For more information on the edge effects that are available, and how the settings on this control tab affect the different effects, see [Edge Effects](470) for more information.

6.10.4.1.15   Field Data Connection Settings (Data)

Enables the configuration and editing of data connection settings for a linked global field.
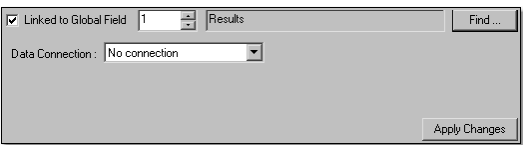
Linked to Global Field check box and increment box

Check this box to link a global field to the selected page template field marker in the current text page. Select the global field that you want to link to using the increment box. If you are unsure of which you global field you want to link to, select Find to display the Global Field Selection dialog box [669] where you can select a global field. With a global field selected, its' description is shown in the grey description text box adjacent to the Find button.

You can break links to global fields using the Page> [390] Break Links to Global Fields [394] command.

Data Connection drop-down list box

```
(No Connection, EXCEL_COM, ACCESS_ODBC, EXCEL_ODBC, Clarity Data Store)
```

With a global field selected, select the data connection type.

Apply Changes button

Select the Apply Changes button to apply the selected data connection settings to the connected global field.

Connection dependant settings

EXCEL_COM	*This is by far the most intelligent of the links because it does not have to poll for changes. When a cell is changed within the Excel spreadsheet, the application receives notification of this and updates the value.*
Control	**Description**
Machine text box	Any machine on the network can be used to run the Excel spreadsheet. A workbook can be specified but is not necessary since the currently loaded workbook will be used. Click on Browse to browse for a machine on the local area network. If machine is set to `localhost` then the local machine is used.
Workbook text box	Specify the name of the Excel workbook.
Sheet increment box	Specify the sheet number within the selected Excel workbook.
Cel text box	Specify the cell reference of the cell containing the desired data.

ACCESS_ODBC	*With an ODBC connection, the application polls for changes in the specified database. The user must specify a database, a table, a refresh rate (which is global to the system) and a query such as "Age" where "Name" equals "20".*
Control	**Description**
Refresh rate increment box	Specify the refresh rate in seconds for the data connection.
Database text box	Specify the name of the Access database. Click on Browse to browse for a database on the local machine or on a machine on the local area network.
Table drop-down list box	Specify the table within the selected Access database.
Field drop-down list box	Specify the field within the selected Access database.
Where drop-down list box	Specify the first part of the query.
Equals drop-down list box	Specify the second part of the query.

Excel_ODBC	*This is much the same as Access (ODBC), except that a special group table is required. Each column in the Excel spreadsheet must be named (using the first entry in that column) and there must be a special group table that groups all the columns that you are interested in.*
Control	**Description**
Refresh rate increment box	Specify the refresh rate in seconds for the data connection.
Workbook text box	Specify the name of the Excel workbook. Click on Browse to browse for a Excel workbook on the local machine or on a machine on the local area network.
Table drop-down list box	Specify the table within the selected Excel workbook.
Field drop-down list box	Specify the field within the selected Excel workbook.
Where drop-down list box	Specify the first part of the query.

Excel_ODBC	This is much the same as Access (ODBC), except that a special group table is required. Each column in the Excel spreadsheet must be named (using the first entry in that column) and there must be a special group table that groups all the columns that you are interested in.
Equals drop-down list box	Specify the second part of the query.

Clarity Data Store	Data Stores are repositories of XML data that can be used by template fields within Clarity template pages. They are effectively internal data arrays within the Clarity system from which data for template fields may be taken. Data Stores are often used to update template fields within continuous ticker animations with different iterations of data over time. Click _here_ 468 to learn more about Data Stores.
Control	**Description**
Data Store increment box	Specify the ID of the Data Store. _Data Stores are created in numerical sequence. Within each Data Store, you can store elements._
Field Offset increment box	Specify the field offset. _Each element can store multiple data offsets (fields) which are numerically sequenced from zero._
Apply data store settings to next 'N' fields check box	Check this box to apply the same settings to the next N fields as configured the adjacent increment box.

6.10.4.1.16   Field Settings (Field)

Enables the configuration and editing of simple settings for an inserted or highlighted page template field marker.
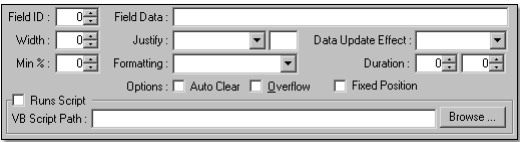
Auto Clear check box

Check the Auto Clear box to enable the page template to be updated quickly.

Decimal separator box

If Decimal is selected from the Just drop-down list box, enter the desired separator in this box.

Data Update Effect drop-down list box

(Cut)

If the contents of a page template field is to be updated on air "in place", without using an on and off animation, you can specify an effect that will be used when the field data is changed. Select an effect using the available options in the Data Update Effect drop-down list box. Only a Cut effect is implemented at this time. Page template fields that are configured with an update effect can still be animated on and off screen using an animation marker in the usual way.

Duration increment boxes

(SS:FF)

Specify a duration for the field update effect in second and frames (SS:FF) using the Duration increment boxes.

Field Data text box

If the selected global field contains data, supplied from a linked global field linked using the Field Data Connection Settings (Data) control tab 281, then this data will appear in the Field Data text input boxes. If this is not the case, enter the data that you want to appear. If you enter new data or edit the current data. This will update the data and description for the current global field on the Global Fields Manager control box.

Field ID increment box

(0-9999)

Edit the value in the Field ID increment box in the range 0-9999. This used to define the page template field ID number.

The way in which page template field numbers are allocated depends on whether the <u>Enforce unique Field IDs across all Text Pages within a Job Page check box</u> [813] in the <u>Field Marker ID's group box</u> [813] on the <u>Edit dialog tab</u> [810] on the <u>User Preferences dialog box</u> [809] is checked. Previously, you could have page template field markers with duplicate ID's on multiple text pages which could cause some confusion during editing. Now when inserting page template field markers, unique field marker IDs can now be optionally forced across multiple text pages contained on the same page. If unique page template field marker ID's are enforced, then the software will not permit the duplication of field ID's across text pages on the current page using the Field ID increment box. Currently allocated ID's will be omitted when incrementing the control. If a field ID is entered using the keyboard that is currently allocated, the ID in the Fields ID increment box will jump to the next un-allocated field ID.

Fixed Position check box

Check the fixed position box to fix the position of the current page template field marker, meaning that it is not subject to movement after changes made to the text in the page.

Formatting drop-down list box

```
(None, Upper Case, Lower Case, Upper First In Field, Upper First In Word)
```

Select a capitalisation setting using the available options in the Formatting drop-down list box. There are four capitalisation modes which can be applied to a page template field marker.

Setting	Description
None	Do not apply any capitalisation. Default setting.
Upper Case	Make all characters from the field marker position upper case.
Lower Case	Make all characters from the field marker position lower case.
Upper First In Field	Make the first character from the field marker position upper case.
Upper First In Word	Make the first character of every subsequent word from the field marker position upper case.

Justify drop-down list box

```
(Left/Top, Right/Bottom, Center, Decimal)
```

Select a field justification setting using the available options in the Just drop-down list box. There are four justification modes which can be applied to a page template field marker.

Setting	Description
Left/Top	Left justify horizontal text or top justify vertical text from the field marker position.
Right/Bottom	Right justify horizontal text or bottom justify vertical text from the field width position.
Center	Centre the text between the marker and field width positions.
Decimal	Act like a decimal tab at the field width position. Specify a decimal separator using the adjacent text box.

Min % increment box

```
(0-100)
```

Edit the value in the Min % increment box. This is a percentage of the default character width allowed for each character within the field (automatic compression).

Overflow check box

Check the Overflow box to enable the page template field to overflow, onto subsequent lines, characters that exceed the configured field width.

Runs Script check box and group box

Check the Runs Script box to enable the page template field to run a script when it is filled with data. Enter the path and file name of the VB script in the VB Script Path text box. Alternatively, select the Browse button to browse the local or network file system and select a VB script file.

Width increment box

```
(n)
```

Edit the value in the Width increment box. This used to define the width of the field in characters for justification and automatic field compression. After entering a value, a green horizontal line will appear in the Graphic Edit window. This line enables interactive manipulation of the selected fields' width using the mouse. Simply click and hold the left mouse button on the arrow handle, then drag the handle to change the width of the field. Refer to the Width increment box or Rulers 261 whilst dragging to ensure that you set the desired width.
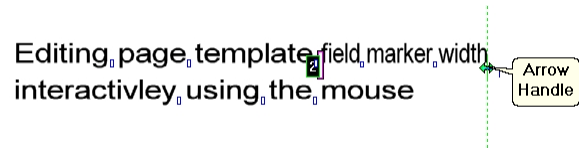
6.10.4.1.17   Key and Grid Settings (Key/Grid)

Enables grid settings and key settings to be configured for the Graphic Edit window 260. You can define grid spacing and origin, the colour and grid locking. Also enables key settings to be configured for the Graphic Edit window. You can select whether to display a representation of the key and if this representation is displayed as a shaded colour percentage (opaque>transparent) or as a checkerboard background.
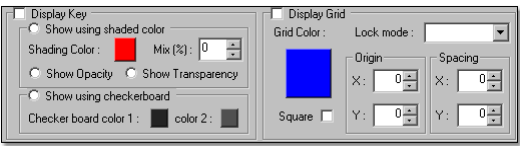
Display Key check box

To display a representation of the key within the Graphic Edit window, ensure that the Display Key box is checked. You can subsequently alter the colour, mix, and transparency/opacity of the key representation.

Show Matte 191
Left CTRL + K

Show using shaded colour radio button

To display a representation of the key within the Graphic Edit window as a shaded colour, ensure that the Show Key Using Shaded Color Background option is selected.

In certain circumstances, foreground objects that have a key are highlighted more effectively with a shaded colour instead of a checkered background. This is dependant on whether you highlight the opacity of the key or the transparency of the key.
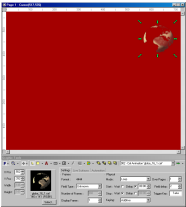
This setting would be generally used when modifying the key of background images using the painting tools.

Shading Colour selection box

If you have selected to display the key as a shaded colour, you can select the colour of the key filter using the Shading Colour selection box.

1.   Select the Shading Colour selection box.
       The Colour Selection dialog box 599 is displayed.
2.   Select a colour from the Colour Selection dialog box, then select OK.

Mix % increment box

If you have selected to display the key as a shaded colour, to configure the mix transparency OR opacity as a percentage of the key representation, type in the required value in the Mix % increment box in the range 0-100 or use the increment and decrement buttons to jog the value up or down. The table below features some example mix settings for both transparent and opaque key representations.

	Highlight Transparency	Highlight Opacity
Mix setting		

	Highlight Transparency	Highlight Opacity
25%		
75%		
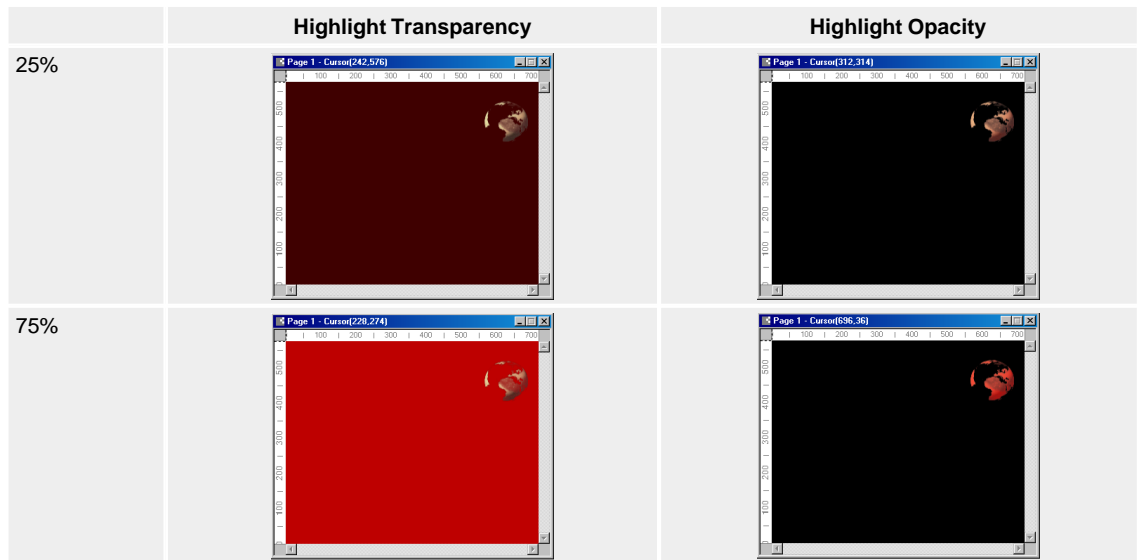
Show Transparency radio button

If you have selected to display the key as a shaded colour, select the Show Transparency option to highlight transparency when representing the key within the Graphic Edit window.

Show Opacity radio button

If you have selected to display the key as a shaded colour, select the Show Opacity option to highlight opacity when representing the key within the Graphic Edit window.

Show using checkerboard radio button

To display the key within the Graphic Edit window as a checkerboard background, ensure that the Show using checkerboard option is selected.

In certain circumstances, foreground objects that have a key are highlighted more effectively with a chequered background instead or a colour, as shown in the example of a cel animation.

This setting would be generally used when manipulating foreground objects that utilise a key e.g. cel animations or picture cutouts.
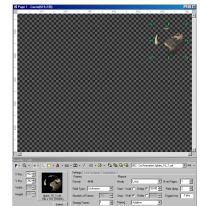
Checkerboard colour 1 and 2 selection boxes

If you have selected to display the key as a checkerboard, you can select the two colours used by the checkerboard using the Checker board colour 1 and 2 selection boxes.

1. Select a colour selection box.
   The Colour Selection dialog box [599] is displayed.
2. Select a colour from the Colour Selection dialog box, then select OK.

Display Grid check box

To display the grid within the Graphic Edit window, ensure that the Display Grid box is checked. You can subsequently alter grid colour, grid locking, squareness of grid sectors and the x and y increment and origin of the grid lines.

Grid Colour selection box

To configure the grid colour:

1. Select the Grid Colour selection box.
   The Colour Selection dialog box [599] is displayed.
2. Select a colour from the Colour Selection dialog box, then select OK.

Lock mode drop-down list

From the Lock drop-down list box, select one of the following locking options:

Option	Functionality
Off	Turns all grid locking off
Intersection	Lock page elements to grid x and y intersections
Horizontal	Lock page elements to x grid parallels
Vertical	Lock page elements to y grid parallels
Follow	Lock page elements to x AND y grid parallels

Square check box

To ensure that grid sectors are square, check the Square box. If the grid X and Y values are unequal, the highest value is used and the lower value is increased accordingly.

X and Y Spacing increment boxes

In the X and Y Spacing increment boxes, type in the required horizontal and vertical grid sizes in pixels or use the increment and decrement buttons to jog the values up or down. For example, an x and y value of 30 would equate to each grid sector being 30 x 30 pixels.

X and Y Origin increment boxes

In the X and Y Origin increment boxes, type in the required horizontal and vertical grid origin points in pixels or use the increment and decrement buttons to jog the values up or down. Varying the values by a few pixels will move the origin of every grid intersection by that amount, enabling accurate placement of intersections for the current page size/aspect ratio.

6.10.4.1.18 Logo Fonts (Logos)

The Logo Fonts control tab may be shown as part of the resizable Styles/Logos control box ⌐351⌐**, if the Float button was previously selected.**

Enables the creation and editing of logo fonts and subsequent selection of a logo to insert into a text page.

A shortcut menu provides access to most of the functionality. See Logos and Logo Fonts shortcut menu ⌐323⌐ for more information. There are a number of tools available on the Logo Fonts control tab and some of their actions are replicated by commands in the Logos and Logo Fonts shortcut menu ⌐323⌐.

Tool	Name	Shortcut menu command or description
	Create New Logo Font	Create a new logo font that you can subsequently add logo characters to. Displays the New Logo Font dialog box ⌐564⌐ where you can define a name and location for the new logo font.
	Import Existing Logo Font	Import logos from an existing logo font into the current logo font. Displays the Import Logo Font dialog box ⌐564⌐ where you can select an existing logo font to import.
	Add Existing Logo Font	Add a existing logo font to the list shown by the Logo font selection drop-down list box. Displays the Add Logo Font dialog box ⌐564⌐ where you can select an existing logo font to add.
	Lock Logos	Lock Logos ⌐323⌐
	Use Logo	Use Logo ⌐323⌐
	Define Logo	Define Logo ⌐323⌐

Tool	Name	Shortcut menu command or description
✖	Delete Stored Logo	Delete Logo 323
▽	Filter Undefined Logos	Filter Undefined Logos 323

Logo font selection drop-down list box

Select an available logo font from the list available. To add a logo font to the list, select the Add Existing Logo Font tool and then select an existing logo font using the Add Logo Font dialog box 564.

Preview list

Displays the entire list of characters and any logos assigned to characters for the selected logo font. Undefined logo characters will not be shown if the Filter Undefined Logos tool is selected. Use the scroll bar at the bottom of the Preview window to view characters in the selected logo font or press a key on the keyboard to navigate to the logo corresponding to that key. Press the arrow keys to highlight individual previews.

To insert a logo at the current text cursor position in a text page, double-click on the desired logo preview in the Preview list or select the Use Logo tool or shortcut menu command 323. To define a logo or edit the properties of the logo associated with the selected character, select the desired preview in the Preview list and then select the Define Logo tool or shortcut menu command 323. The Edit Logo Character Glyph dialog box 626 is displayed.

Float button

To display a floating version of the Logo Fonts control tab (Styles/Logos control box> 351 Logo Fonts control tab 352), select the Float button in the top-right hand corner of the control tab

6.10.4.1.19 Logo Properties (Logo)

Enables the configuration of the highlighted logos' properties within a text page.

In order for this control tab to be displayed, you must highlight a logo file in a text page with the text cursor

Preview window

Displays a preview of the highlighted logo.

Select button

Click on Select to select a new logo to replace the highlighted logo. The Insert Logo dialog box 673 is displayed where a new logo file can be selected.

Type group box

Select either Solid, Cutout and Matte Fill from the Type group box.

Type	Description
Solid	Insert as a solid picture.
Cutout	Use the key saved with a picture as a cutout for the logo. If no matte was saved with the picture, then this option will have no effect.
Matte Fill	Use the key saved with a picture as a matte filled shape. This will use the logo picture key channel to define a shape which will be filled by the current foreground drawing colour and shading.

Fixed Size check box

By default, the picture will be resized to the current text height before is was inserted as a logo. To ensure that the logo is displayed at its full size, check the Fixed Size box.

Maintain Aspect check box

Check the Maintain Aspect box to maintain the aspect ratio of the highlighted logo file.

6.10.4.1.20   Logos (Logos)

The Logos control tab may be shown as part of the resizable Styles/Logos control box 351 **, if the Float button was previously selected.**

Enables the definition, editing and insertion of logos.
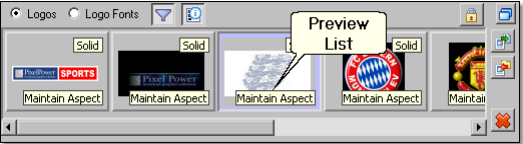
Insert Logo 190
Logo 187

A shortcut menu provides access to most of the functionality offered by the Logos control tab. See Logos and Logo Fonts shortcut menu 323 for more information. There are a number of tools available on the Logos control tab and their actions are replicated by commands in the Logos and Logo Fonts shortcut menu 323. Some of the tools are only shown on the floating version of the Logos control tab (Styles/Logos control box> 351 Logos control tab 352).

Tool	Name	Shortcut menu command
	Lock Logos	Lock Logos 323
	Use Logo	Use Logo 323
	Define Logo	Define Logo 323
	Delete Stored Logo	Delete Logo 323
	Filter Undefined Logos	Filter Undefined Logos 323
	Show Logo Information	Show Logo Information 323

Preview list

Displays the entire list of available logo entries. Undefined logo entries will not be shown if the Filter Undefined Logos tool is selected. Use the scroll bar at the bottom of the Preview list to view logo entries. Press the arrow keys to highlight individual previews.

To insert a logo at the current text cursor position in a text page, double-click on the desired logo preview in the Preview list or select the Use Logo tool or shortcut menu command 323. To define a logo, select the desired preview in the Preview list and then select the Define Logo tool or shortcut menu command 323. The Insert Logo dialog box 673 is displayed where you can select a logo image.

After inserting a logo, it can resized by highlighting the logo with the text cursor and then using the Height and Width increment boxes in the Text Page static control area 313. Alternatively, you can resize the logo interactively using the mouse. Simply click and hold the left mouse button on an arrow handle, then drag the handle to change the logo height and/or width.

Float button

To display a floating version of the Logos control tab (Styles/Logos control box> ⌐351⌐Logo control tab ⌐352⌐), select the Float button in the top-right hand corner of the control tab.

6.10.4.1.21   Paint Settings (Paint)

Enables the configuration of a custom brush profile and image and also enables selection of an image for the textured brush and undo image buffers.
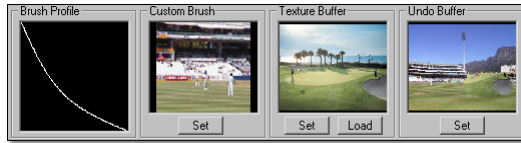
Brush Profile mimic

Configure the brush profile by dragging the pointer around the mimic, varying the density from the centre to the edge of the brush stroke.

Brush Profile 1

Brush Profile 2
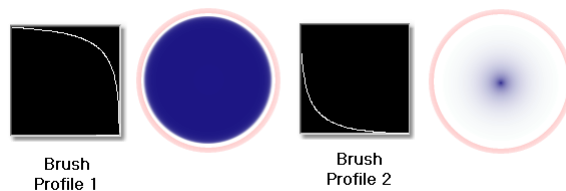
Custom Brush mimic

Although the software has a selection of pre-defined paint, air and geometric brushes, user defined brush shapes can also be created. Any small area of image and key can be sampled from screen for use as a custom brushed shape and/or colour.

Select Set to define an area of the current page background as a custom brush. The Paint Instructions prompt appears giving instructions on what to do. Press the left mouse button and drag the pointer over an area of the background image.

The selection area is restricted to the x and y size of the Custom Brush mimic. After releasing the left mouse button, the selected area is loaded into the buffer.

Texture Buffer mimic

Any brush may be filled using the Texture Buffer mimic control. With the texture buffer filled with an image, each brush stroke will reveal a portion of that same image.

Select Set to copy the current page background into the Texture Buffer mimic. The current page background is loaded into the buffer.

Select Load to open the Freehand Painting Texture dialog box ⌐642⌐ where you can select an image to load into the Texture Mimic buffer.

Undo Buffer mimic

This buffer is used to capture a snapshot of the working image as painting progresses. Selecting Undo will restore the working image to the contents of this buffer.

Select Set to copy the current page background into the Undo Buffer mimic. The current page background is loaded into the buffer.

6.10.4.1.22   Paste Live Audio (Audio)

Enables configuration of how the live audio associated with the selected paste live object is heard during playback and transitional animation (squeezeback).

As pasted live objects are played out, or the DSK state switched, the audio output will follow that associated with the respective video source.

Pasted live objects can have gain values set so that audio is attenuated by the specified amount, with the level fading up to unity gain when the video is triggered to full-screen, with other obscured live sources fading down to zero.

This gain level can be configured using the Default paste live associated audio level text box on the Video Associations sub-tab 703 of the Audio Settings dialog tab 697.

Associated Live Audio Level increment box

Using the Associated Live Audio Level increment box, override the gain level of associated audio over the default level set.

Override Fade Duration check box

To be completed at a later date.

<PAW>

Fade Duration increment box

Using the Fade duration, configure the duration in milliseconds of the audio fade between two audio sources when they switched.

6.10.4.1.23   Photoshop Image Layer (Layer)

Only available when a Adobe Photoshop image (.PSD) file has been inserted as a cutout using the Graphics> 395 Shapes>Cutout 403 command.

Enables the selection of specific layers from the selected Adobe Photoshop cutout image. Also enables the creation of separate cutouts from available layers in the selected cutout.
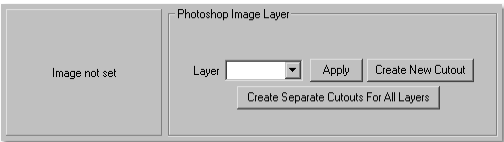
Preview window

Displays a preview of the selected cutout. The layer selected using the Layer drop-down list box is represented in the Preview window.

Layer drop-down list

Select the desired layer to be displayed or to be used as a new cutout using the Layer drop-down list box.

Layer	Description
Merged	All layers in the selected Photoshop image.
n	Individual layer in the selected Photoshop image.

Apply button

Select the Apply button to set the selected cutout to display the layer selected using the Layer drop-down list box.

Create New Cutout button

Select the Create New Cutout button to create a new cutout from the selected existing cutout using the layer selected in the Layer drop-down box.

Create Separate Cutouts From All Layer button

Select the Separate Cutouts From All Layer button to create a new cutout from every available layer in the current selected cutout.

6.10.4.1.24   Rotate

The 3D Transform control tab contains controls which enable graphic objects to be manipulated within a pseudo three dimensional space.
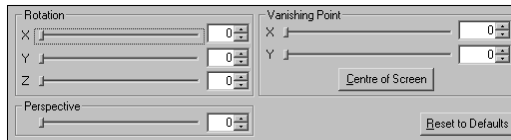
Rotation group box

```
(-180 to +180)
```

Use the X, Y and Z sliders or enter values in the related increment boxes to manipulate the selected graphic object on its x, y and z axis in degrees.

Perspective group box

```
(0 to 100)
```

Use the slider or enter a value in the related increment box to manipulate the perspective for the selected graphic object.

Vanishing point group box

```
(0 to max number of pixels for page format)
```

Use the X and Y sliders or enter values in the related increment boxes to manipulate the vanishing point for the selected graphic object.

The x and y range that you can manipulate within is dictated by the active resolution of the video format for the page currently open in the Graphic Edit window.

For example, if you are page is configured for PAL 625 lines, you can configure the x vanishing point between 0 and 576 pixels and the y vanishing point between 0 and 720 pixels

Select the Centre of Screen button to reset the vanishing point to the centre of the screen.

Reset to Defaults button

Select the Reset to Defaults button to reset the selected graphic object back to normal 2D perspective.

6.10.4.1.25   Safe Area (Safe)

Only available when no page elements are selected in the Graphic Edit window.

Enables safe area settings to be configured for the Graphic Edit window. A safe action area, safe title area and 4:3 safe title area can be configured and displayed all at the same time.
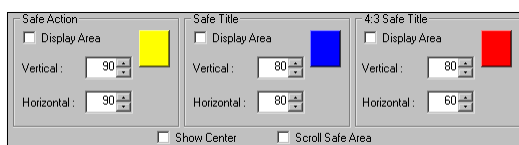
Each of the three safe areas is defined using a set of replicated controls within each of the three group boxes.

Vertical increment box

In a Vertical increment box, type in the relevant required vertical safe area range in the range 0-100% or use the increment and decrement buttons to jog the value up or down. For example, a value of 90% would equate to having a 5% non-safe area at both the top and bottom of the page.

Horizontal increment box

In a Horizontal increment box, type in the relevant horizontal vertical safe area range in the range 0-100% or use the increment and decrement buttons to jog the value up or down. For example, a value of 90% would equate to having a 5% non-safe area at both the left and right of the page.

Colour selection box

To configure the relevant safe area colour:

1.   Select the Colour selection box. The <u>Colour Selection dialog box</u> 599ʳ is displayed.
2.   Select a colour from the Colour Selection dialog box, then select OK.

Display Area check box

To ensure that the relevant safe area is displayed within the Graphic Edit window, check the relevant Display Area box.

Show Center check box

To ensure that a cross hair is displayed in the centre of the Graphic Edit window, check the Show Center box.

Scroll Safe Area check box

To ensure that safe areas are scrolled when scrolling pages within the Graphic Edit window, check the Scroll Safe Area box. If the Scroll Safe Area box is left unchecked, safe area percentages will be maintained when scrolling pages i.e the safe area will move with the scroll.

6.10.4.1.26   Style Protect (Prot.)

The Style Protect control tab features a selection of check boxes to enable the protection of different formatting aspects for the currently selected block of text within a text page.
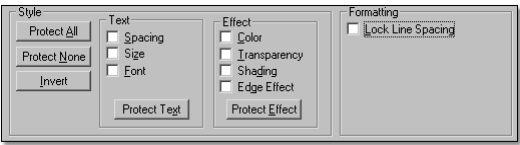
Protect All button

Select Protect All to ensure that all boxes are checked in the Text group box and Effect group box.

Protect None button

Select Protect None to ensure that all boxes are cleared in the Text group box and Effect group box.

Invert button

Select Invert to invert the current check box selection in the Text group box and Effect group box.

Text group box

Control	Function
Spacing check box	Protects the character spacing of the text.
Size check box	Protects the height and width of the text.
Font check box	Protects the font and italic angle of the text.

Control	Function
Protect Text button	Select all check boxes, ensure the above aspects of text protection are enabled.

Effect group box

Control	Function
Colour check box	Protects the colour attributes of the selected text.
Transparency check box	Protects the transparency attributes of the selected text.
Shading check box	Protects the shading attributes of the selected text.
Edge Effect check box	Protects the edge effect attributes of the selected text.
Protect Effect button	Select all check boxes, ensuring the above aspects of effect protection are enabled.

Formatting group box

Control	Function
Lock Line Spacing check box	Prevent accidental re-spacing of lines within a text page.

6.10.4.1.27   Texture

Enables the selection of a texture for use when Texture or Texture Map is selected as the shading type for the Foreground, Edge or Shadow plane on the Colour control tab |277⟩ and Transparency control tab |295⟩. It also enables the configuration of the texture map offset when Texture Map is selected as the shading type for the Foreground, Edge or Shadow plane on the Colour control tab |277⟩ and Transparency control tab |295⟩.
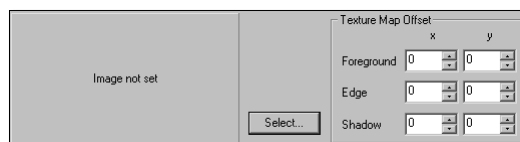
You can only apply a single texture to a selected page element or selected block of text within a text page. When a new texture is selected, the properties of the selected page element or selected block of text will update to reflect the new texture selection.

Image Preview window

Displays a preview of how the select texture will appear with the current offset settings.

Select button

Click on Select to display the Open Texture Picture dialog box |750⟩ where an texture image can be selected.

Texture map offset group box

`(0 to 9999)`

The X and Y increment boxes featured in the Texture Map Offset group box enable the X and Y offset (in pixels) of the current texture to be configured in relation to the bottom left hand corner of the selected page element or text block.

Texture map offset can also be configured interactively using the mouse when the Texture Map Offset edit mode |483⟩ is selected. The controls are only available for configuration when Texture Map is selected as the shading type for the Foreground, Edge or Shadow plane on the Colour control tab |277⟩. Offset values are given in pixels.

For example, if Texture Map is selected as the shading style for the Foreground plane on the Colours control tab, only the Foreground X and Y increment boxes will become available for configuration.

NOTE

If all or part of a selected page element or text block to be textured is outside the area covered by the texture image, then the texture image will be tiled to cover the required area.

6.10.4.1.28 Transparency (Trans.)

Enables the configuration of foreground, edge and shadow plane transparency for a selected page element or text block within a text page. This facility is useful for creating graduated stencils and may remove the requirement for a stencil during graphics construction.
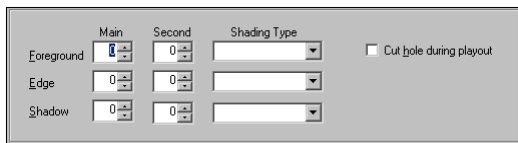
The illustration shows how a Main 50% transparency setting affects the Foreground Main, Edge Main and Shadow Main colour planes of a page element configured with a Solid shading type.
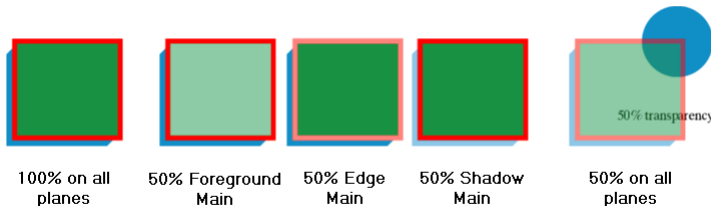
Foreground Main and Secondary increment boxes

`(0-100)`

Adjust the numeric values in the Main or Secondary increment boxes to configure the opacity in percent of the Foreground plane for the selected page element or text block.

The Main increment box relates to the Foreground Main plane and as a result configures the opacity of the Foreground Main colour selected on the Colour control tab 277. The Secondary increment box relates to the Foreground Secondary plane and as a result configures the opacity of the Foreground Secondary colour selected on the Colour control tab. 277

Edge Main and Secondary increment boxes

`(0-100)`

Adjust the numeric values in the Main or Secondary increment boxes to configure the opacity in percent of the edge plane for the selected page element or text block.

The Main increment box relates to the Edge Main plane and as a result configures the opacity of the Edge Main colour selected on the Colour control tab 277. The Secondary increment box relates to the Edge Secondary plane and as a result configures the opacity of the Edge Secondary colour selected on the selected on the Colour control tab 277.

Shadow Main and Secondary increment boxes

`(0-100)`

Adjust the numeric values in the Main or Secondary increment boxes to configure the opacity in percent of the Shadow plane for the selected page element or text block.

The Main increment box relates to the Shadow Main plane and as a result configures the opacity of the Shadow Main colour selected on the Colour control tab. The Secondary increment box relates to the Shadow Secondary plane and as a result configures the opacity of the Shadow Secondary colour selected on the Colour control tab 277.

Shading Type drop-down list boxes

`(Solid, Vertical, Horizontal, Point, Line, Texture, Texture Map)`

The Shading Type drop-down list boxes are used to specify a shading type or texture for Foreground, Edge and Shadow plane transparency of the selected page element or text block within a text page. When Texture or Texture Map is selected from a Shading Type drop-down list box, the key or stencil of the texture picture is used as the texture source.

Where applicable, shading types fill in set direction (graduate) between the colours specified using the Main and Secondary colour selection boxes for the selected plane.

Cut hole during playout check box

Foreground page elements can be configured to cut holes in other foreground layers, showing the content of lower foreground layers. This can create some useful and interesting effects. In the simplest example, a shape can cut a hole through a picture cutout in the layer below, exposing a background clip.
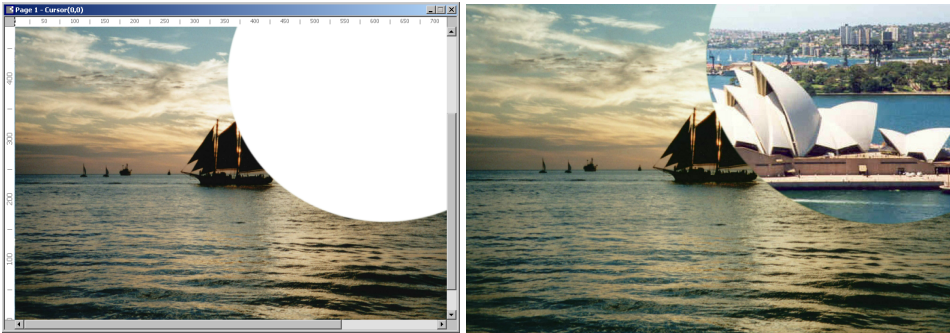
The circle is configured with the Cut hole during playout setting. **Once this settings is turned on, it becomes the default setting for all new page elements that are created, typed or inserted.**

NOTE

Support for page elements that are configured to cut holes in foreground layers is **ONLY** featured on the main output channel(s) and will not work on the auxiliary channel(s) (if present).

SEE ALSO

[Complex masked squeezeback credit roller/promo](#) [1116]

6.10.4.1.29   Triggers (Trig.)

Enables configuration of triggering settings for foreground pasted clips and live objects. Used when configuring squeezeback effects.
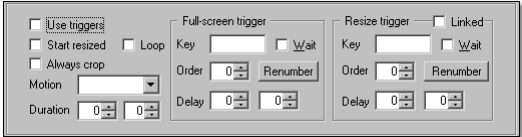
Use triggers check box

Check the Use triggers box to enable triggering for the selected foreground clip or paste live video object. Clear the box to configure foreground clip or paste live video object to be static.

Start resized check box

Check the Start resized check box to start the selected clip or live object in its current resized state. If the Start resized box is cleared, the selected clip or live object will start at full screen size.

Loop check box

Check the Loop box to enable looping of the animation effect between the start and resized states using the defined triggers keys, until the next page is taken or page playout is stopped. If the Loop box is cleared, the animation will complete after a single instance of the animation effect.

Always crop check box

Check the Always Crop box to keep the cropping ratio constant throughout the triggered motion. If the Always crop box is cleared, then the cropping ratio will reduce to zero as triggered motion is completed. See below:

Starting size and crop	Setting	Resized

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   296

Copyright © 2000-2006 Pixel Power Ltd.

With the Always crop box checked.

With the Always crop box cleared.
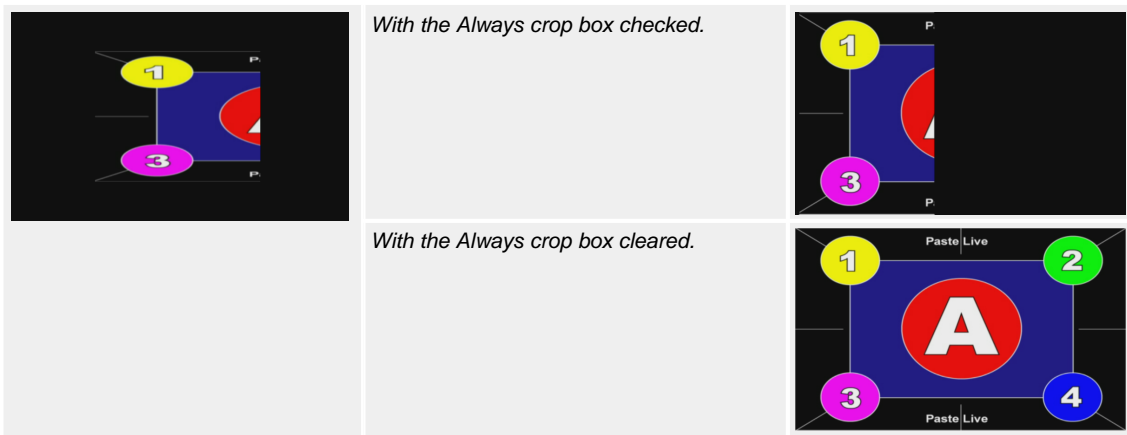
Motion drop-down list box

```
(Linear, Cushion, Cushion In, Cushion Out, Curve In, Curve Out)
```

Use the Motion drop-down list box to set the desired motion for the squeezeback animation.

Motion Type	Description
Linear	Apply no cushioning or curve to the animation effect. Linear motion from start to end position.
Cushion	Apply a cushion to the start and end of the animation.
Cushion In	Apply a cushion to the start of animation.
Cushion Out	Apply a cushion to the end of animation.
Curve In	Animate effect with a curved inward motion.
Curve Out	Animate effect with a curved outward motion.

Duration increment boxes

Configure the duration and seconds and frames for the squeezeback animation using the Duration increment boxes.

Full Screen trigger group box

The controls on this group box enable the configuration of trigger settings that are used whilst the video clip or pasted live video object is at non-full screen size.

Configure the trigger key to animate the object whilst at non-full screen size using the Key text box. If you want the software to wait for this key to be pressed before beginning the animation, check the Wait box.

If the Wait box is cleared, the animation will start after the delay configured using the Delay increment boxes and will ignore the selected trigger key.

By default, the playout order of foreground clips and pasted live objects is the order that they are created in. All objects are given a playout order of 0 by default (as shown in the Order increment box). Edit the value in the Order increment box to change the playout order in relation to other animation effects that use the same trigger key and have a playout order other than zero.

Resize Screen trigger group box

The controls in this group box enable the configuration of trigger settings that are used whilst the video clip or pasted live video object is at full screen size.

If you want to use exactly the same settings as configured in the Full Screen trigger group box, ensure that the Linked box is check. This disables all other control in the group. Clear the Liked both to enable the controls and configure different trigger settings for the resize stage of the animation.

Configure the trigger key to animate the object whilst at full screen size using the Key text box. If you want the software to wait for this key to be pressed before beginning the animation, check the Wait box.

If the Wait box is cleared, the animation will start after the delay configured using the Delay increment boxes and will

ignore the selected trigger key.

By default, the playout order of foreground clips and pasted live objects is the order that they are created in. All objects are given a playout order of 0 by default (as shown in the Order increment box). Edit the value in the Order increment box to change the playout order in relation to other animation effects that use the same trigger key and have a playout order other than zero.

6.10.4.1.30   User Defined Styles (Styles) (Crop Styles)

The User Defined Styles control tab may be shown as part of the resizable Styles/Logos control box ⌐35⌐**, if the Float button was previously selected.**

Enables up to:

* 26 user defined styles to be created, stored and applied explicitly by the user;
* 16 recently used styles to be automatically stored, tracked and listed in order of use during text styling.
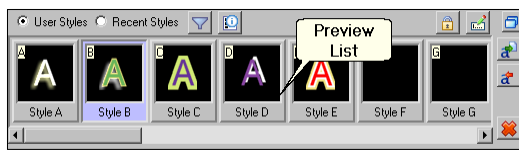
Style A-H RapidAction keys ⌐191⌐

Style A-H RapidAction keys ⌐187⌐

Styles can be applied to selected text within a text page or to entire text line, text spline, shape and cutout elements. When creating pages of text, there are many thousands of ways of drawing the same character if all the combinations of fonts, sizes, shading styles, edge effects, colours and transparency are taken into account. However, only a few different style combinations would normally be used at any one time, and they would be fixed for a particular programme or series.

A style comprises the font name, height and width, edge effect, colours and shading type; i.e. all the information needed to define the look of a text character. User defined styles are referred to by the letters 'A' through 'Z'. In addition to the creation of new styles, the User Defined Styles control tab also enables current styles to be browsed and selected. Styles can also be used with rectangle shapes, rounded rectangle shapes and cutouts.

When text elements are selected within the Graphic Edit window, the User Defined Styles control tab is named Styles and enables all of the attributes associated with text styling (e.g. font, height, colour, edge effect, position etc.) to be stored for subsequent recall. When rectangle shapes, rounded rectangle shapes and cutouts are selected, the User Defined Styles control tab is named Crop Styles. This naming change gives an indication of the functionality offered when these types of graphic element are selected. The User Defined Styles control tab enables you to store ONLY size, position, edge effect and cropping settings for rectangle shapes, rounded rectangle shapes and cutouts.

In the CG Tools software, there is the concept of User Defined Styles and Recent Styles. You can toggle the Preview list to show either style grouping using the User Styles and Recent Styles options respectively at the top of the control tab.

Type	Description	Label in preview list
User Defined Styles	Up to 26 user defined styles can be created, stored and applied explicitly by the user using the User Defined Styles control tab and the Style A-H keys on RapidAction keyboards ⌐177⌐.	`Style A-Z`
Recent Styles	Up to 16 recently used styles can be automatically stored, tracked and listed in order of use during text styling. Any user defined styles that have been recently used are shown.	`Style A-Z`
	In addition, the CG Tools software automatically keeps track of changes made to settings on the Graphic Tools with respect to text styling. A library of these changes for the current session is kept, thus enabling you to go back and re-style text using formatting characteristics that were previously configured, but were NOT explicitly stored as a user defined style. These styles remain unnamed, unlike user defined styles.	N/A

A shortcut menu provides access to most of the functionality. See User Defined Styles shortcut menu ⌐32⌐ for more

information. There are a number of tools available on the User Defined Styles control tab and their actions are replicated by commands in the User Defined Styles shortcut menu [321]. Some of the tools are only shown on the floating version of the User Defined Styles control tab (Styles/Logos control box> [351] Styles control tab [353]).

Tool	Name	Shortcut menu command	Availability	
			Floated	Static
🔒	Lock Styles	Lock Styles [321]	■	■
	Use Style	Use Style [321]	■	■
	Define Style	Define Style [321]	■	■
	Define Style And Apply To Whole Page	Advanced Define Style>Define And Apply To Page [321]	■	
	Define Style And Apply to All Pages	Advanced Define Style>Define And Apply to All Pages [321]	■	
	Define Style From Cursor	Advanced Define Style>Define From Cursor [321]	■	
✖	Delete Stored Style	Delete Style [321]	■	■
	Rename Style	Rename Style [321]	■	■
	Filter Undefined Styles	Filter Undefined Styles [321]	■	■
	Show Style Information	Show Style Information [321]	■	■

User Styles option

To display user defined styles in the Preview list, select the User Styles option. Undefined user defined styles will not be shown if the Filter Undefined Styles tool is selected.

Recent Styles option

To display a list of recent user defined styles that have been used and recent styles that have automatically been stored, tracked and listed in order of use by the CG Tools software, select the Recent Styles option.

Preview list

Displays a list of:

- 26 user defined styles that have created and stored explicitly by the user;
- 16 recently used styles that have been automatically stored, tracked and listed in order of use during text styling.

With the Style Copy function turned on (Style Copy check box on the Text Page control set [313]), when you move the cursor to a location which is using a user defined style, the Preview list scrolls to make sure the selected style is visible. Use the scroll bar at the bottom of the Preview list to view styles in the Preview list. Press the arrow keys to highlight individual previews.

To apply a style to selected text, double-click on the desired style preview in the Preview list or select the Use Style tool or shortcut menu command [321]. To define a user defined style using the characteristics of the selected text, select the desired preview in the Preview list and then select the Define Style tool or shortcut menu command [321].

Float button

To display a floating version of the User Defined Styles control tab (Styles/Logos control box> [351] Styles control tab [353]), select the Float button in the top-right hand corner of the control tab.

6.10.4.1.31   View

Only available when no page elements are selected in the Graphic Edit window.

Enables the configuration of how graphic elements are portrayed within the Graphic Edit window in relation to the current edit monitor and monitor displaying the CG output.
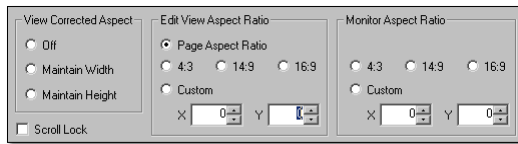
View Corrected Aspect group box

Select the Off option to turn off the display of graphic elements with a corrected aspect ratio.

Select the Maintain Width option to display graphic elements with their correct width maintained. Their height is adjusted accordingly.

Select the Maintain Height option to display graphic elements with their correct height maintained. Their width is adjusted accordingly.

Edit View Aspect Ratio group box

If you have selected to Maintain Width or Maintain Height, enables the selection of the correct aspect ratio of the monitor displaying the CG output.

Select the Page Aspect option to use the aspect ratio of pages when they are opened for editing in the Graphics Edit window.

Select from the 4:3, 14:9 or 16:9 options to select the desired aspect ratio.

If you need to configure a custom aspect ratio, select Custom and then configure the X and Y increment boxes.

Monitor Aspect Ratio group box

If you have selected to Maintain Width or Maintain Height, enables the selection of the correct aspect ratio of the current edit monitor.

Select from the 4:3, 14:9 or 16:9 options to select the desired aspect ratio.

If you need to configure a custom aspect ratio, select Custom and then configure the X and Y increment boxes.

Scroll Lock check box

Lock foreground scrolling for the selected page(s) in the Page Browser 251 /Page List 252 . Also configured using the Page> 390 Foreground Options>Scroll Lock 394 command.

By default, the foreground will pan in any required direction as text is entered into a text page on the foreground of that page. When deleting a text page in the selected page foreground, you may want to lock foreground scrolling so that the foreground remains stationary as the text page extends beyond the visible area of the page. Scroll Lock foreground status for the selected pages(s) is indicated by the Scroll Lock label in the Foreground column of the Page List 252 .

6.10.4.2   Static control area

The static control area (shown in blue in the picture below) is the area of the Graphic Tools where detailed configuration can be achieved for most objects selected within the Graphic Edit window.
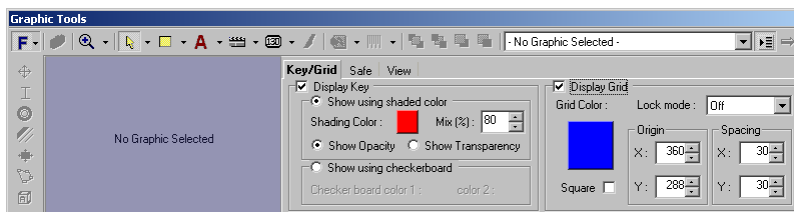
6. Getting started

Graphical User Interface (GUI) tour

This area is context sensitive: the control sets available change depending on what is selected or being created. New or edited static control areas since the last release are highlighted with dark grey shading. The <edge effect><foreground/edge/shadow colour selector> [302] is present on all control sets, enabling the selection of an edge effect and main and secondary colours for the foreground, edge or shadow graphic planes for a selected object.

The Style key on RapidAction version 2 keyboards [188] can be used to direct focus to the relevant control set in the Static control area [300] on the Graphic Tools, thus enabling configuration of styling attributes using the cursor keys (e.g. font, font height etc.)

Control set	Displayed when
Arc [302]	• an arc is drawn using the Arc tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing arc is selected within the Graphic Edit window.
Cel and Clip [303]	• a new cel animation is compiled using the Create Cel Animation tool from the Cel and Clip toolbox [319] on the Graphic Tools [266] toolbar; • a new video clip is compiled using the Create Video Clip tool from the Cel and Clip toolbox [319] on the Graphic Tools [266] toolbar; • an existing compiled cel animation is inserted using the Cel Animation tool from the Cel and Clip toolbox [319] on the Graphic Tools [266] toolbar; • an existing compiled cel animation is selected within the Graphic Edit window.
Circle [304]	• a circle is drawn using the Circle tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar • an existing circle is selected within the Graphic Edit window.
Cutout [305]	• a picture cutout is inserted using the Cutout tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing cutout is selected within the Graphic Edit window.
Ellipse [305]	• a ellipse is drawn using the Ellipse tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing ellipse is selected within the Graphic Edit window.
Line [306]	• a line is drawn using the Line tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing line is selected within the Graphic Edit window.
Paint [306]	• working in the background of a page and painting mode is selected using the Brush tool on the Graphic Tools [266] toolbar.
Paste Live [307] and Paste [307] Clip [307]	• a live object is inserted using the Paste Live tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar; • a clip is inserted using the Paste Clip tool from the Cel and Clip toolbox [317] on the Graphic Tools [266] toolbar; • an existing pasted live object is selected within the Graphic Edit window; • an existing pasted clip is selected within the Graphic Edit window.
Polygon [308]	• a polygon is drawn using the Polygon tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing polygon is selected within the Graphic Edit window.
Rectangle [309]	• a rectangle is drawn using the Rectangle tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing rectangle is selected within the Graphic Edit window.
Regular [309] Polygon [309]	• a regular polygon is drawn using the Regular Polygon tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing regular polygon is selected within the Graphic Edit window.
Rounded [310] Rectangle [310]	• a rounded rectangle is drawn using the Rounded Rectangle tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing rounded rectangle is selected within the Graphic Edit window.
Spline [311]	• a spline is drawn using the Spline tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing spline is selected within the Graphic Edit window.
Star [312]	• a star is drawn using the Star tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar; • an existing star is selected within the Graphic Edit window.

Control set	Displayed when
Text Line/ 312 Clock 312	• a text line is typed using the Text Line tool from the Text toolbox 320 on the Graphic Tools 266 toolbar; • a date clock or digital clock is inserted using the Date Clock or Digital Clock tool from the Clock toolbox 317 on the Graphic Tools 266 toolbar; • an existing text line or clock is selected within the Graphic Edit window.
Text Page 313	• a text page is typed using the Text Page tool from the Text toolbox 320 on the Graphic Tools 266 toolbar; • the text cursor is present within an existing text page within the Graphic Edit window.
Text Spline 315	• a text spline is typed using the Text Spline tool from the Text toolbox 320 on the Graphic Tools 266 toolbar; • an existing text spline is selected within the Graphic Edit window.

6.10.4.2.1   <edge effect><foreground/edge/shadow colour selector>

Present on all control sets, this range of controls enable the selection of main and secondary colours for the foreground, edge or shadow graphic planes 498. Clicking on one of the six colour selection boxes will display the relevant colour controls on the Colour control tab 277. You can then configure the colour settings for that graphic plane using the Colour control tab. It also enables the selection of an edge effect 470 for the selected graphic element. This functionality is mirrored on the Edge Effects control tab 281. When an edge effect is selected using the drop-down list box, the Edge Effects control tab 281 control is automatically selected, thus enabling the configuration of edge effect parameters.
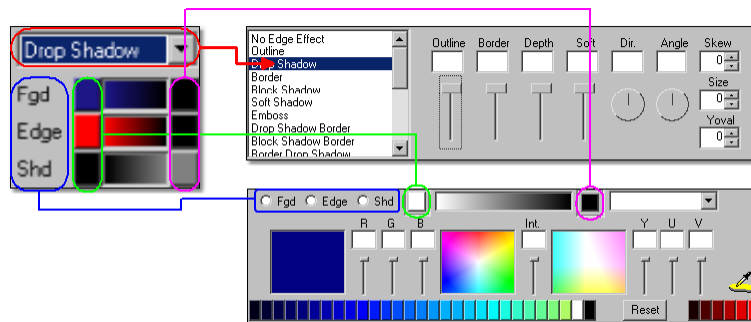
NOTE

After selecting an area of text that features differing attributes over the entire selection, only common parameters that are configured across the entire selection will be interpreted intelligently for configuration. For example, if a selected area of text in a text page features multiple colours defined for the same colour plane (e.g. foreground), the relevant colour selection box(es) will be greyed out. Again, this does NOT mean that the colour cannot be configured, but if it is, it will apply to the entire selection and the different colours will become consistent.

6.10.4.2.2   Arc

The Arc control set is shown when:

•   an arc is drawn using the Arc tool from the Shape toolbox 319 on the Graphic Tools 266 toolbar;
•   an existing arc is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Radius increment box

In the Radius increment box, type in the required radius value in pixels or use the increment and decrement buttons to jog the value up or down.

Start increment box

`(0-360)`

In the Start increment box, type in the required start angle in degrees or use the increment and decrement buttons to jog the value up or down.

Angle increment box

`(0-360)`

In the Angle increment box, type in the required size of the arc segment in degrees or use the increment and decrement buttons to jog the value up or down

NOTE

Angles are measured counter-clockwise with 0 degrees being at the quarter past three position.

SEE ALSO

Shape toolbox ⌐319⌐
Graphics>Shapes>Arc ⌐403⌐

6.10.4.2.3 Cel and Clip

The Cel and Clip control set is shown when:

- a new cel animation is compiled using the Create Cel Animation tool from the Cel and Clip toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
- a new video clip is compiled using the Create Video Clip tool from the Cel and Clip toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
- an existing compiled cel animation inserted using the Cel Animation tool from the Cel and Clip toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
- an existing compiled cel animation is selected within the Graphic Edit window ⌐260⌐.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

Aspect Ratio check box

Check the Aspect Ratio box to make sure that the aspect ratio is always maintained during editing.

Original Size button

Select Original Size to revert back to the original default size of a starting cel or clip image.

Compile button

Select Compile to either:

- compile the selected first cel image and its related image sequence. The Save Cel Animation dialog box [783] is displayed at the file location where the first cel was located. The Compiling Cell File dialog box [599] is subsequently displayed after selecting OK on the Save Cel Animation dialog box.
- compile the selected first clip image and its related image sequence. The Clip Explorer [370] is displayed where you can select a local clip drive or local hard disk to compile the video clip to.

Recompile button (replaces the Compile button) (only applies to cel animations)

Once a cel animation has been compiled or an existing cel animation is selected in the Graphic Edit window [260], the Compile button is replaced by the Recompile button. The Recompile button is very useful in situations where you have changed the image sequence used to create the cel animation, but you want to preserve compiled cel animation settings e.g. position, size, playback/ trigger settings and live surface assignments (3D live surface cel animations only). With a cel animation selected in the Graphic Edit window, select the Recompile button. The Recompile Cel Animation From Picture dialog box [780] is displayed at the file location that was last used.

Select button

Click on Select to either:

- replace the first cel or clip image with another and its related image sequence. The Open Cutout Picture dialog box [749] is displayed;
- replace the selected compiled cel animation. The Open/Insert Cel Animation dialog box [751] is displayed.

Preview area

The Preview area displays a preview of the first cel or clip image or compiled cel animation.

SEE ALSO

Cel and Clip toolbox [317]
Graphics>Cels / Video>Cel Animation [404]
Graphics>Cels / Video>Create Cel Animation [404]

6.10.4.2.4   Circle

The Circle control set is shown when:

- a circle is drawn using the Circle tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar
- an existing circle is selected within the Graphic Edit window.
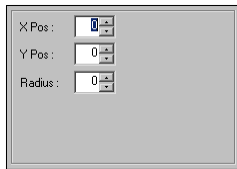
X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Radius increment box

```
(0-360)
```

In the Radius increment box, type in the required radius value in pixels or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Shape toolbox [319]
Graphics>Shapes>Circle [401]

6.10.4.2.5　Cutout

The Cutout control set is shown when:

- a picture cutout is inserted using the Cutout tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar;
- an existing cutout is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

Aspect Ratio check box

Check the Aspect Ratio box to make sure that the aspect ratio is always maintained during editing.

Original Size button

Click on Original Size to revert back to the original default size of a cutout image.

Select button

Click on Select to replace the cutout image with another. The Open Cutout Picture dialog box is displayed.

Type drop-down list box

`(Solid, Cutout, Matte)`

If you want to select the type of cutout, change the cutout type by selecting either Solid, Cutout or Matte from the drop-down list box adjacent to the Select button.

Preview area

The Preview area displays a preview of the cutout image.

SEE ALSO

Shape toolbox [319]
Graphics>Shapes>Cutout [403]

6.10.4.2.6　Ellipse

The Ellipse control set is shown when:

- a ellipse is drawn using the Ellipse tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar;
- an existing circle is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Radius X and Radius Y increment boxes

In the Radius X and Radius Y increment boxes, type in the required radius value in pixels or use the increment and decrement buttons to jog the values up or down.

SEE ALSO

Shape toolbox 319
Graphics>Shapes>Ellipse 401

6.10.4.2.7   Line

The Line control set is shown when:

- a line is drawn using the Line tool from the Shape toolbox 319 on the Graphic Tools 266 toolbar;
- an existing line is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the Start X and Start Y Pos increment boxes, type in the required X and Y line start point position values in pixels or use the increment and decrement buttons to jog the values up or down.

End X and End Y increment boxes

In the End X and End Y Pos increment boxes, type in the required X and Y line end point position values in pixels or use the increment and decrement buttons to jog the values up or down.

Width increment box

`(0-64)`

In the Width increment box, type in the required thickness of the line in pixels or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Shape toolbox 319
Graphics>Shapes>Line 402

6.10.4.2.8   Paint

The Paint control set is shown when:

- working in the background of a page and painting mode is selected using the Brush tool on the Graphic Tools 266 toolbar;
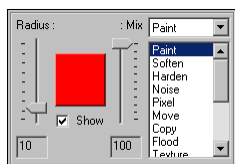
Radius slider

`(1 to 64)`

Drag the slider to set the radius (size) of the brush in pixels.

Mix Slider

`(0 to 100)`

Drag the slider to set the mix (transparency) of the brush as a percentage. Variable from 0 to 100% opaque.

Brush colour selection box

Click on the colour selection box to display the Colour control tab 277 where you can select a new colour for the brush. Brush colour can be picked from any area of screen or mixed in RGB, YUV and HLS colour models.

Show check box

Check the Show box to display the brush outline when working in the Graphic Edit window. Clear the box to hide the brush outline.

Brush Type drop-down list box

`(Paint, Airbrush, Eraser)`

Select the type of brush that you want to use from the list available.

Brush action list box

`(Paint, Soften, Harden, Noise, Pixel, Move, Copy, Flood, Texture, Drag, Field 1, Field 2, Field Avg, User Col, User Prof)`

Select the action of the selected brush type from the list available.

SEE ALSO

Graphic Tools 266

6.10.4.2.9 Paste Live and Paste Clip

The Paste Live and Paste Clip control set is shown when:

- a live object is inserted using the Paste Live tool from the Cel and Clip toolbox 317 on the Graphic Tools 266 toolbar;
- a clip is inserted using the Paste Clip tool from the Cel and Clip toolbox 317 on the Graphic Tools 266 toolbar;
- an existing pasted live object is selected within the Graphic Edit window;
- an existing pasted clip is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

Original size button

Select Original Size to revert back to the original default size of pasted live video object or pasted clip.

ID drop-down list box

For use when creating multiple squeezeback effects over two pages.

If more that one pasted object or clip is inserted on the same page, select the same ID as the pasted live object or clip that you want to link to on the second page.

Source drop-down list box (Paste live objects only)

```
(Default, Live A, Live B)
```

Change the video source for the selected paste live object by selecting either Default, Live A or Live B from the Source drop-down list box. For more information on video sources, refer to the Chan A or Chan B dialog tab ⌐790⌐ on the SD Hardware Configuration dialog box ⌐786⌐.

Add To Pg Duration check box (Paste clip objects only)

Check the Add To Pg Duration check box to include the selected foreground clip when the page duration is calculated. This setting is useful when using foreground clips instead of page background clips which are automatically included. It is important to note that the duration of foreground clips can only be calculated and subsequently added to the current page duration if the clip is configured with a loop duration OTHER than infinite. Clip playback settings can be configured using the Cel Animation\Video Clip Playout dialog box ⌐587⌐ which can be displayed by selecting Set Loop/Pause on the Clip Playback Settings control tab ⌐276⌐.

Soft Edge check box and drop-down list box

```
(0-32)
```

Check the Soft Edge box to apply a soft edge to improve the appearance any edge anomalies surrounding a pasted live video image or pasted clip whilst online. In the adjacent Width increment box, type in the required width of the soft edge in pixels or use the increment and decrement buttons to jog the value up or down.

Live Preview check box (Paste live objects only)

Check the Live Preview box to make optionally preview the selected live video input source instead of the default pasted live video object test card on the Clarity Edit output.

Override Key check box

Check the Override key box to override any key supplied with the live video input or factored into the pasted clip with a 100% key value provided by the software.

Aspect Ratio check box

Check the Aspect Ratio box to make sure that the aspect ratio is always maintained during editing.

SEE ALSO

Cel and Clip toolbox ⌐317⌐
Graphics>Cels / Video>Paste Live ⌐404⌐
Graphics>Cels / Video>Paste Clip ⌐405⌐

6.10.4.2.10   Polygon

The Polygon control set is shown when:

- a polygon is drawn using the Polygon tool from the Shape toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
- an existing polygon is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the

increment and decrement buttons to jog the values up or down.

Width and Height increment boxes
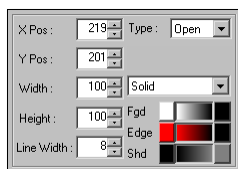
In the Width and Height increment boxes, type in the required X and Y axis size value as a percentage or use the increment and decrement buttons to jog the values up or down.

Line Width increment box

`(0-64)`

In the Width increment box, type in the required thickness of the polygon in pixels or use the increment and decrement buttons to jog the value up or down.

Type drop-down list box

Change the polygon mode by selecting either Open, Closed or Filled from the Type drop-down list box.

SEE ALSO

Shape toolbox |319|
Graphics>Shapes>Polygon |402|

6.10.4.2.11   Rectangle

The Rectangle control set is shown when:

- a rectangle is drawn using the Rectangle tool from the Shape toolbox |319| on the Graphic Tools |266| toolbar;
- an existing rectangle is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

SEE ALSO

Shape toolbox |319|
Graphics>Shapes>Rectangle |400|

6.10.4.2.12   Regular Polygon

The Regular Polygon control set is shown when:

- a regular polygon is drawn using the Regular Polygon tool from the Shape toolbox |319| on the Graphic Tools |266| toolbar;
- an existing regular polygon is selected within the Graphic Edit window.
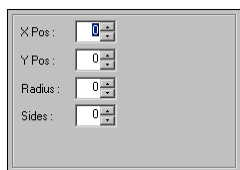
X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Radius increment box

In the Radius increment box, type in the required radius value in pixels or use the increment and decrement buttons to jog the value up or down.

Sides increment box

`(0-100)`

In the Sides increment box, type in the required number of sides or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Shape toolbox ⌐319¬
Graphics>Shapes>Regular Polygon ⌐402¬

6.10.4.2.13   Rounded Rectangle

The Rounded Rectangle control set is shown when:

- a rounded rectangle is drawn using the Rounded Rectangle tool from the Shape toolbox ⌐319¬ on the Graphic Tools ⌐266¬ toolbar;
- an existing rounded rectangle is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

Curve increment box

`(0-100)`

In the Curve increment box, type in the required corner radius value as a percentage or use the increment and decrement buttons to jog the value up or down.

Skew increment box

`(0-89)`

In the Skew increment box, type in the required skew angle value in pixels or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Shape toolbox ⌐319¬
Graphics>Shapes>Rounded Rectangle ⌐400¬

6.10.4.2.14 Select Rectangle

The Select Rectangle control set is shown when:

- a selection area is drawn using the Select Rectangle tool from the Selector toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
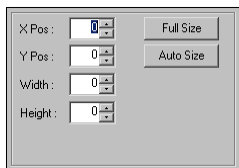
X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.
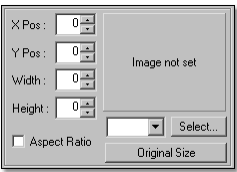
Full Size button

Click on Original Size to revert the selector rectangle back to the original default size of the page currently open in the Graphic Edit window ⌐260⌐.

Auto Size button

Click on the Auto Size button to automatically size the selector rectangle to match exactly the size of a picture or graphic element in the background layer of the current page. There are two things to note when using this feature:

a) you must fully encompass the desired object or picture area with the selector rectangle before selecting the Auto Size button;
b) the object or picture area must be sufficiently different in colour/luminance to the surrounding area for the software to interpret the area and thus resize the selector rectangle to it.

6.10.4.2.15 Spline

The Spline control set is shown when:

- a spline is drawn using the Spline tool from the Shape toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar;
- an existing spline is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Width and Height increment boxes

In the Width and Height increment boxes, type in the required X and Y axis size value in pixels or use the increment and decrement buttons to jog the values up or down.

Line Width increment box

(0-64)

In the Width increment box, type in the required thickness of the spline in pixels or use the increment and decrement buttons to jog the value up or down.

Type drop-down list box

`(Open, Filled, Closed)`

Change the spline mode by selecting either Open, Closed or Filled from the Type drop-down list box.

Spline drop-down list box

`(Cubic, Beta, Bezier)`

If you want to change the type of spline that you have drawn, change the spline type by selecting either Cubic, Beta or Bezier from the Spline drop-down list box.

SEE ALSO

Shape toolbox 319
Graphics>Shapes>Spline 402

6.10.4.2.16   Star

The Star control set is shown when:

• a star is drawn using the Star tool from the Shape toolbox 319 on the Graphic Tools 266 toolbar;
• an existing star is selected within the Graphic Edit window.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Radius X and Radius Y increment boxes

In the Radius X and Radius Y increment boxes, type in the required radius value in pixels or use the increment and decrement buttons to jog the values up or down.
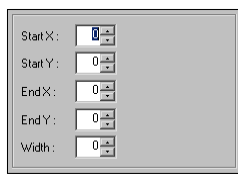
Sides increment box

`(0-100)`

In the Sides increment box, type in the required number of sides or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Shape toolbox 319
Graphics>Shapes>Star 401

6.10.4.2.17   Text Line/Clock

The Text Line/Clock control set is shown when:

• a text line is typed using the Text Line tool from the Text toolbox 320 on the Graphic Tools 266 toolbar;
• a date clock or digital clock is inserted using the Date Clock or Digital Clock tool from the Clock toolbox 317 on the Graphic Tools 266 toolbar;
• an existing text line or clock is selected within the Graphic Edit window.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   312

Copyright © 2000-2006 Pixel Power Ltd.
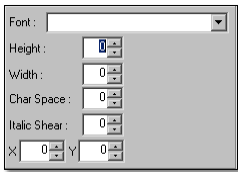
Fonts drop-down list box

The font for the text line or clock is indicated by the Font drop-down list box.

Height increment box

In the Height increment box (which gives the height of the text in scanlines), type in the required height value or use the increment and decrement buttons to jog the value up or down.

Width increment box

In the Width increment box, type in the required width value or use the increment and decrement buttons to jog the value up or down. Set the width value to 100% for normal aspect ratio text.

Char Space increment box

In the Char Space increment box, type in the required character spacing value as a percentage of the character width or use the increment and decrement buttons to jog the spacing value up or down.

Italic Shear increment box

```
(-30 to 30)
```

In the Italic Shear increment box, enter the italic angle required in degrees, or use the increment and decrement buttons to jog the angle up or down.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

SEE ALSO

Text toolbox 320
Text>Text Line 410
Clock toolbox 317
Graphics>Clocks>Digital Clock 403
Graphics>Clocks>Date Clock 403

6.10.4.2.18   Text Page

The Text Page control set is shown when:

- a text page is typed using the Text Page tool from the Text toolbox 320 on the Graphic Tools 266 toolbar;
- the text cursor is present within an existing text page within the Graphic Edit window.
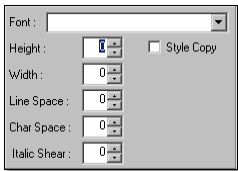
After selecting an area of text that features differing attributes over the entire selection, only common parameters available in the Text Page control set that are configured across the entire selection will be interpreted intelligently for configuration. For example, if a selected area of text in a text page features multiple text heights, then Height increment box will show no value. This does NOT mean that the value cannot be configured, but if it is, it will apply to the entire selection and the different text heights will become consistent.

Fonts drop-down list box

The font for the selected text or character at the current cursor position is indicated by the Font drop-down list box. When selecting an alternative font, you have the option of filtering font types to make identification and selection easier. After opening the drop-down list box, select one of the following options at the bottom of the list to filter the font types displayed:
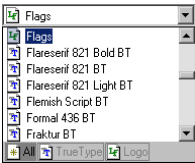
Control	Function
All	Show all fonts available to the current system.
TrueType	Show only TrueType fonts available to the current system.
Logo	Show only logo fonts available to the current system. Logo fonts can be created and managed using the Logo Fonts control tab [287].

At any time whilst browsing for a font, you can press ESC and revert back to the original selected font without making any changes.

Height increment box

In the Height increment box (which gives the height of the text in scan lines), type in the required height value or use the increment and decrement buttons to jog the value up or down.

Width increment box

In the Width increment box, type in the required width value or use the increment and decrement buttons to jog the value up or down. Set the width value to 100% for normal aspect ratio text.

Char Space increment box

In the Char Space increment box, type in the required character spacing value as a percentage of the character width or use the increment and decrement buttons to jog the spacing value up or down.

Italic Shear increment box

```
(-30 to 30)
```

In the Italic Shear increment box, enter the italic angle required in degrees, or use the increment and decrement buttons to jog the angle up or down.

Style Copy check box

The style copy functionality can be configured to be always off, always on or user changeable. This functionality can be configured using the Lock Style Copy drop-down list box [815] on the Edit dialog tab [810] on the User Preferences dialog box [809]. If this function it set to Always On or Always Off, then the Style Copy check box is disabled. Check the Style Copy box to automatically pick up the styling from the character underneath the cursor. Also available using Text> [408] Style Copy [418]. When the style copy functionality is turned on, the text cursor colour will change in the Graphic Edit window to indicate this. The cursor colour can be configured using the Cursor Color With Style Copy On control [814] on the Edit dialog tab [810] on the User Preferences dialog box [809].

Style Copy RapidAction key [192]
Left CTRL + Left ALT + J
Left CTRL + Left ALT + K

SEE ALSO

Text toolbox [320]
Text>Text Page [410]

6.10.4.2.19   Text Spline

The Text Spline control set is shown when:

- a text spline is typed using the Text Spline tool from the Text toolbox [320] on the Graphic Tools [266] toolbar;
- an existing text spline is selected within the Graphic Edit window.
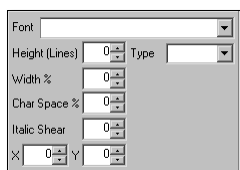
Fonts drop-down list box

The font for the text spline is indicated by the Font drop-down list box.

Height increment box

In the Height increment box (which gives the height of the text in scanlines), type in the required height value or use the increment and decrement buttons to jog the value up or down.

Width increment box

In the Width increment box, type in the required width value or use the increment and decrement buttons to jog the value up or down. Set the width value to 100% for normal aspect ratio text.

Char Space increment box

In the Char Space increment box, type in the required character spacing value as a percentage of the character width or use the increment and decrement buttons to jog the spacing value up or down.

Italic Shear increment box

```
(-30 to 30)
```

In the Italic Shear increment box, enter the italic angle required in degrees, or use the increment and decrement buttons to jog the angle up or down.

X Pos and Y Pos increment boxes

In the X Pos and Y Pos increment boxes, type in the required X and Y axis position (centre) value in pixels or use the increment and decrement buttons to jog the values up or down.

Type drop-down list box

```
(Open, Filled, Closed)
```

Change the spline mode by selecting either Open, Closed or Filled from the Type drop-down list box below the Font drop-down list.

SEE ALSO
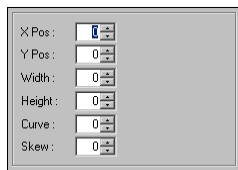
Text toolbox [320]
Text>Text Spline [410]

6.10.4.3   Toolbar

The Graphic Tools toolbar (shown in blue in the picture below) provides access to a large proportion of the functionality found in the Graphics [395], Text [408] and Background [419] menus. The toolbar features several drop-down toolboxes that help save space on the toolbar. Toolboxes are indicated by the drop-down marker. To access the tools available within a toolbox, select the marker and select a tool from the list.

315   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
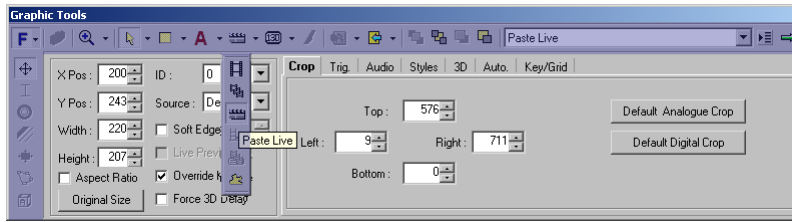
The toolbar is context sensitive, so depending on what you are creating or editing within the Graphic Edit window [260], the featured toolboxes will change. For instance, the Text Format toolbox [320] replaces the Format Graphic toolbox [317] when working with text objects. New or edited tools/toolboxes since the last release are highlighted with dark grey shading. Some functions available from the Graphic Tools toolbar are mirrored by related menu commands.

Default Tool	Toolbox Name	Tool Name	Related menu command or purpose
F	Layer [318]		
(icon)		Grab Video Frame	Background> [419] Grab Video Frame [420]
(icon)	Zoom [321]		
(icon)	Selector [319]		
(icon)	Shape [319]		
A	Text Object [320]		
(icon)	Cel and Clip [317]		
(icon)	Clock [317]		
(icon)		Brush	Background> [419] Paint [421]
(icon)	Marker [318]		
(icon)	Text Format [320]		
(icon)	Format Graphic [317]		
(icon)		Bring to Front	Graphics> [395] Send to Back [400]
(icon)		Send to Back	Graphics> [395] Send to Back [400]
(icon)		Bring Forward	Graphics> [395] Bring Forward [399]
(icon)		Send Backward	Graphics> [395] Send Backward [400]
(dropdown)		Select Graphic	
(icon)		Show/Hide Layer Tree	View> [421] Edit View>Layer Tree [423]
(icon)	Select Graphic [319]		
(icon)		Size And Move	Graphics> [395] Graphic Edit Mode>Size And Move [398]
(icon)		Edit Text	Graphics> [395] Graphic Edit Mode>Text [399]
(icon)		Point Shading	Graphics> [395] Graphic Edit Mode>Point Shading [398]

Default Tool	Toolbox Name	Tool Name	Related menu command or purpose
		Line Shading	Graphics> [395] Graphic Edit Mode>Line Shading [398]
		Texture Offset	Graphics> [395] Graphic Edit Mode>Texture Map Offset [398]
		Vertex Editing	Graphics> [395] Graphic Edit Mode>Vertex [399]
		Edit Autobox Style	Graphics> [395] Graphic Edit Mode>Edit Autobox Style [399]

6.10.4.3.1 Cel and Clip toolbox

All functions available from the Cel and Clip toolbox are mirrored by related Graphics [395] menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Insert Cel Animation	Graphics> [395] Cels / Video>Cel Animation [404]
	Create Cel Animation	Graphics> [395] Cels / Video>Create Cel Animation [404]
	Paste Live	Graphics> [395] Cels / Video>Paste Live [404]
	Paste Clip	Graphics> [395] Cels / Video>Paste Clip [405]
	Create Video Clip	Graphics> [395] Cels / Video>Create Video Clip [404]
	Cutout	Graphics> [395] Shapes>Cutout [403]

6.10.4.3.2 Clock toolbox

All functions available from the Clock toolbox are mirrored by related Graphics [395] menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Digital Clock	Graphics> [395] Clocks>Digital Clock [403]
	Date Clock	Graphics> [395] Clocks>Date Clock [403]

6.10.4.3.3 Format Graphic toolbox

All functions available from the Format Graphic toolbox are mirrored by related Graphics [395] menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Left Format	Graphics> [395] Formatting>Left [405]
	Right Format	Graphics> [395] Formatting>Right [405]
	Top Format	Graphics> [395] Formatting>Top [406]
	Bottom Format	Graphics> [395] Formatting>Bottom [406]
	Horizontal Format	Graphics> [395] Formatting>Centre Horizontal [406]

Tool	Tool Name	Related menu command
	Vertically Format	Graphics> [395] Formatting>Vertical Format [406]

6.10.4.3.4   Layer toolbox

Some functions available from the Layer toolbox are mirrored by related Background [419] menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Edit Foreground Layer	
	Edit Background Layer (Both Fields)	Background> [419] Display/Edit Both Fields [421]
	Edit Background Layer (Field 1)	Background> [419] Display/Edit Field 1 [420]
	Edit Background Layer (Field 2)	Background> [419] Display/Edit Field 2 [420]
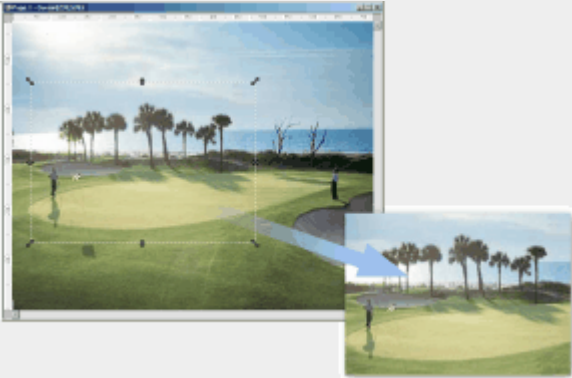
6.10.4.3.5   Marker toolbox

All functions available from the Marker toolbox are mirrored by related Text [408] and Graphics [395] menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Insert Animation Marker	Text> [408] Markers>Insert>Animation [411] Graphics> [395] Animated Path [400]
	Insert Field Marker	Text> [408] Markers>Insert>Field [411]
	Insert Motion Marker	Text> [408] Markers>Insert>Motion [411]
	Insert End Marker	Text> [408] Markers>Insert>End [411]
	Edit Marker	Text> [408] Markers>Edit [412]
	Renumber Field Markers	Text> [408] Markers>Renumber Fields [412]
	Show Field Markers	Text> [408] Markers>Show Field Markers [412]
	Show Markers	Text> [408] Markers>Show Markers [412]
	Show Formatting Characters	Text> [408] Markers>Show Formatting Characters [412]
	Lock Field	Text> [408] Markers>Lock Field [413]
	Protect Page Layout From Editing	Text> [408] Markers>Edit Protect [413]

6.10.4.3.6 Selector toolbox

The functions offered by the tools in the Selector toolbox are NOT available on any of the menus and their functions are explained in this section. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Description
	Select	This is the default tool that is selected when working within the Graphic Edit window |260|. This tool, in conjunction with the available graphic edit modes |479| selectable using the Graphic Tools toolbar |315|, enable text and graphic objects to be selected and manipulated and have their shading properties edited interactively.
	Select Rectangle	Enables the selection of a specific area of the background layer of the current page in the Graphic Edit window |260|. You can then subsequently save this cropped using Background> |419| Save Background |420|. You can manually resize the rectangle area using the four handles or use the Auto Size button on the Select Rectangle control set |311| to resize to an explicit object or picture area in the background layer. You can revert back to the original size for the current page using the Original Size button.

6.10.4.3.7 Select Graphic toolbox

All functions available from the Select Graphic toolbox are mirrored by related Graphics |395| menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Select First Graphic	Graphics> |395| Select>First Graphic |397|
	Select Previous Graphic	Graphics> |395| Select>Previous Graphic |397|
	Select Next Graphic	Graphics> |395| Select>Next Graphic |397|
	Select Last Graphic	Graphics> |395| Select>Last Graphic |397|

6.10.4.3.8 Shape toolbox

All functions available from the Shape toolbox are mirrored by related Graphics |395| menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Rectangle	Graphics> |395| Shapes>Rectangle |400|
	Rounded Rectangle	Graphics> |395| Shapes>Rounded Rectangle |401|
	Circle	Graphics> |395| Shapes>Circle |401|

Tool	Tool Name	Related menu command
	Ellipse	Graphics> 395 Shapes>Ellipse 401
	Star	Graphics> 395 Shapes>Star 401
	Regular Polygon	Graphics> 395 Shapes>Regular Polygon 402
	Line	Graphics> 395 Shapes>Line 402
	Polygon	Graphics> 395 Shapes>Polygon 402
	Spline	Graphics> 395 Shapes>Spline 402
	Arc	Graphics> 395 Shapes>Arc 403
	Cutout	Graphics> 395 Shapes>Cutout 403

6.10.4.3.9 Text Format toolbox

All functions available from the Marker toolbox are mirrored by related Text 408 menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Align Top	Text> 408 Justification>Top 415
	Align Left	Text> 408 Justification>Left 413
	Centre	Text> 408 Justification>Centre 413
	Align Right	Text> 408 Justification>Right 414
	Align Bottom	Text> 408 Justification>Bottom 415
	Justify	Text> 408 Justification>Justify 414
	Centre About Cursor	Text> 408 Justification>Centre On Cursor 414
	Centre Text Vertically	Text> 408 Justification>Centre Vertically 414
	Push Up Text	Text> 408 Justification>Push Up 414
	Word Wrapping	Text> 408 Word Wrap 415
	Reverse Lines	Text> 408 Reverse Lines 416

6.10.4.3.10 Text Object toolbox

All functions available from the Text Object toolbox are mirrored by related Text 408 menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
	Text Page	Text> 408 Text Page 410
	Text Line	Text> 408 Text Line 410

Tool	Tool Name	Related menu command
![A icon]	Text Spline	Text> |408| Text Spline |410|

6.10.4.3.11   Zoom toolbox

All functions available from the Zoom toolbox are mirrored by related View |421| menu commands. New or edited tools since the last release are highlighted with dark grey shading.

Tool	Tool Name	Related menu command
![Zoom In icon]	Zoom In	View> |421| Zoom In |425|
![Zoom Out icon]	Zoom Out	View> |421| Zoom Out |425|
![Default Zoom icon]	Default Zoom	View> |421| Zero Origin |425|
![50% icon]	50% Zoom	View> |421| Zoom>50% |425|
![100% icon]	100% Zoom	View> |421| Zoom>100% |425|
![200% icon]	200% Zoom	View> |421| Zoom>200% |425|
![400% icon]	400% Zoom	View> |421| Zoom>400% |426|
![800% icon]	800% Zoom	View> |421| Zoom>800% |426|

6.10.4.4   Shortcut menus

A number of shortcut menus are available when working with the Graphic Tools. New or edited shortcut menus since the last release are highlighted with dark grey shading.

Shortcut menu	Displayed when
User Defined Styles |321|	Enables access to commands relevant when working with styles and user defined styles on the User Defined Styles (Styles) (Crop Styles) control tab |298|.
Logos and Logo Fonts |323|	Enables access to commands relevant when working with logos and logo fonts on the Logos (Logos) control tab |289| and the Logo Fonts (Logos) control tab |287| respectively.

6.10.4.4.1   User Defined Styles shortcut menu

Enables access to commands relevant when working with user defined styles and recent styles on the User Defined Styles (Styles) (Crop Styles) control tab |298| or the Styles control tab |353| on the floating Styles/Logos control box |351|. This shortcut menu can be displayed by right-clicking within the Preview list. The available commands, corresponding tools and their actions are explained below. New or edited menu commands since the last release are highlighted with dark grey shading.

Command	Sub menu command	Tool	Description
Lock Styles		![lock icon]	Toggle the locking of user defined styles, thus either enabling or disabling them to be renamed, deleted or defined. This command is ticked when user defined styles are locked.
Use Style		![a icon]	Apply, to selected text or a graphic element, the selected style in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab |298| or the Styles control tab |353| on the floating Styles/Logos control box |351|.

Command	Sub menu command	Tool	Description
Define Style			Store the properties of selected text or a graphic element to the selected user defined style in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐.
Advanced Define Style	Define And Apply To Page		*Tool only available on the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. As per the Define Style command (text elements only), but additionally applies the new user defined style to text that matches the formatting of the newly defined style within the current text page.*
	Define And Apply to All Pages		*Tool only available on the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. As per the Define Style command (text elements only), but additionally applies the new user defined style to text that matches the formatting of the newly defined style both within the current text page AND any other text page.*
	Define From Cursor		*Tool only available on the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. Stores the properties of the text at the current text cursor position to the selected user defined style in the Preview list. Used to define styles WITHOUT formatting selected text with that style.*
Delete Style			Clear the properties of the selected user defined style in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. Any text or graphic element that uses the selected user defined style will become disassociated with the style.
Rename Style			Rename the selected user defined style in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. The selected style name becomes editable. Press Enter to complete the editing of the name.
View User Style			Display user defined styles in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. This command is marked when used.
View Recent Style			Display recent styles in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. This command is marked when used.
Filter Undefined Styles			Toggle the display of undefined user defined styles in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐. This command is ticked when undefined user defined styles are filtered.
Show Style Information			Toggle the display of extended information about styles in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐. Extended information includes font type, font height, selected edge effect etc. As a result of displaying extended style information, fewer previews will be visible. This command is ticked when style information is shown.
Use Preview Color			Use the preview colour defined using the Set Preview Colour command as the background of previews shown in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab ⌐298⌐ or the Styles control tab ⌐353⌐ on the floating Styles/Logos control box ⌐351⌐. In certain circumstances, text is highlighted more effectively with a colour instead of a chequered background. This command is marked when used.

Command	Sub menu command	Tool	Description
Use Checkerboard			Use a checkerboard as the background of previews shown in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab 298⌐ or the Styles control tab 353⌐ on the floating Styles/Logos control box 351⌐. In certain circumstances, text is highlighted more effectively with a chequered background instead of a colour. This command is marked when used.
Set Preview Color			Display the Colour Selection dialog box 599⌐ where you can select a different background colour to enable previews within the Preview list to become more contrasting.
Set Preview Text			Display the Set Preview Text dialog box 801⌐ where you can configure the preview text shown by each style preview shown in the Preview list on the User Defined Styles (Styles) (Crop Styles) control tab 298⌐ or the Styles control tab 353⌐ on the floating Styles/Logos control box 351⌐. If this setting is not configured, then previews will use the default "A" character.

6.10.4.4.2   Logos and Logo Fonts shortcut menu

Enables access to commands relevant when:

- working with logos on the Logos control tab 289⌐ on the Graphic Tools 266⌐ or the Logos control tab 352⌐ on the floating Styles/Logos control box 351⌐;
- working with logo fonts on the Logo Fonts control tab 287⌐ on the Graphic Tools 266⌐ or the Logo Fonts control tab 352⌐ on the floating Styles/Logos control box 351⌐.

This shortcut menu can be displayed by right-clicking within the Preview list on the control tabs listed above. The available commands and their actions are explained below. New or edited menu commands since the last release are highlighted with dark grey shading.

Command	Availability		Tool	Description
	Logos	Logo Fonts		
Lock Logos	■	■		Toggle the locking of logos and logo fonts, thus either enabling or disabling them to be renamed, deleted, defined or edited. This command is ticked when logos or logo fonts are locked.
Use Logo	■	■		Insert the logo selected in the Preview list at the current cursor position within the current text page.
Define Logo	■	■		*Logos* Assign a new logo to the selected entry in the Preview list. The Insert Logo dialog box 673⌐ is displayed where you can select a logo image. *Logo Fonts* Edit the properties for a logo associated with a selected character in the Preview list. Displays the Edit Logo Character Glyph dialog box 626⌐ where you can edit the defined glyph.
Delete Logo	■	■		*Logos* Delete the selected logo from the Preview list. *Logo Fonts* Delete the selected logo from the Preview list and from the current selected logo font.
Filter Undefined Logos	■	■		Toggle the display of undefined logos in the Preview list.

Command	Availability		Tool	Description
	Logos	Logo Fonts		
Show Logo Information	■			Toggle the display of extended information about logos in the Preview list. This extended information includes whether logos have their aspect ratio maintained and their fill type.
Solid	■	■		*Logos* Initially configured using the *Logo Fill Mode group box* 674 on the *Insert Logo dialog box* 673. Set the logo selected in the Preview list to appear as a solid picture. This command is marked when used. *Logo Fonts* Also configured using the *Cutout mode group box* 626 on the *Edit Logo Character Glyph dialog box* 626. Set the logo selected in the Preview list to appear as a solid picture. This command is marked when used.
Cutout	■	■		*Logos* Initially configured using the *Logo Fill Mode group box* 674 on the *Insert Logo dialog box* 673. Set the logo selected in the Preview list to appear as a cutout, using the key saved with the image. If no key was saved with the image, then this option will have no effect. This command is marked when used. *Logo Fonts* Also configured using the *Cutout mode group box* 626 on the *Edit Logo Character Glyph dialog box* 626. Set the logo selected in the Preview list to appear as a cutout, using the key saved with the image. If no key was saved with the image, then this option will have no effect. This command is marked when used.
Matte	■	■		*Logos* Initially configured using the *Logo Fill Mode group box* 674 on the *Insert Logo dialog box* 673. Set the logo selected in the Preview list to appear as a matte filled shape, using the key saved with the image. This will use the key channel to define a shape which will be filled by the current foreground drawing colour and shading. This command is marked when used. *Logo Fonts* Also configured using the *Cutout mode group box* 626 on the *Edit Logo Character Glyph dialog box* 626. Set the logo selected in the Preview list to appear as a matte filled shape, using the key saved with the image. This will use the key channel to define a shape which will be filled by the current foreground drawing colour and shading. This command is marked when used.
Use Fixed Size	■	■		*Logos* Initially configured using the *Fixed Size check box* 674 on the *Insert Logo dialog box* 673. Set the logo selected in the Preview list to appear at its full size. This command is ticked when the logo is set to display at a fixed size. *Logo Fonts* Also configured using the *Fixed Size check box* 626 on the *Edit Logo Character Glyph dialog box* 626. Set the logo selected in the Preview list to appear at its full size. This command is ticked when the logo is set to display at a fixed size.

Command	Availability		Tool	Description
	Logos	Logo Fonts		
Maintain Aspect	■			*Initially configured using the Maintain Aspect check box* [674] *on the Insert Logo dialog box* [673]*. Set the logo selected in the Preview list to maintain its aspect ratio. This command is ticked when the logo is set to maintain its aspect ratio.*
Set As Default Logo		■		Set the logo selected in the Preview list to be the default logo.

6.10.5 Page Stack

The Page Stack control box enables different page playout orders or 'stacks' to be defined for any Clarity playout channel or UI software playback channel using Microsoft Windows drag-and-drop functionality. Page stacks are not limited to the playout of pages within the current job. Stills and images can also be inserted from disk and inserted alongside pages from the current job. This enables great flexibility during playout.
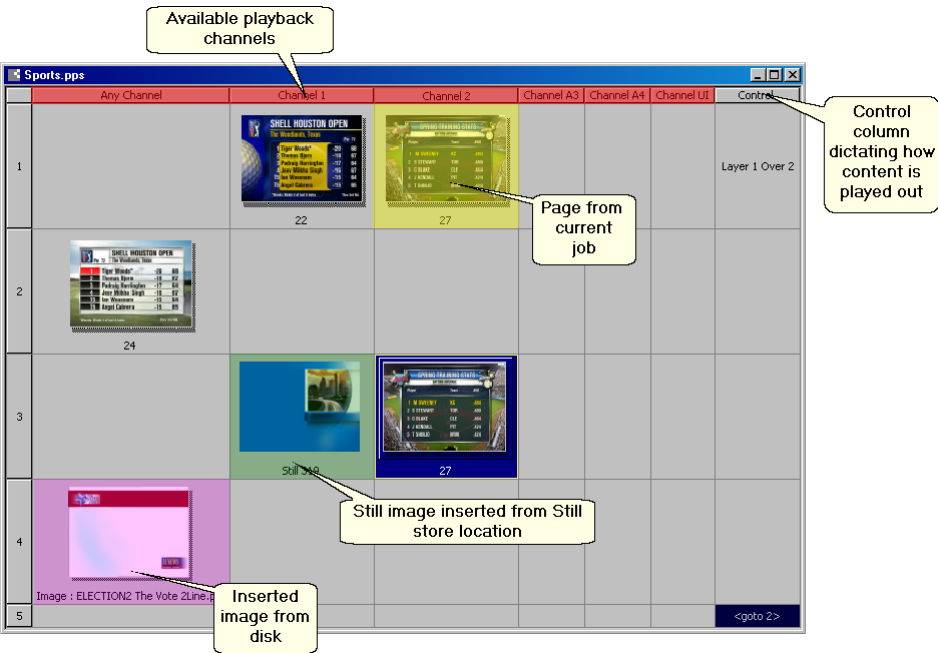
Page stacks can be created from scratch (File>New Stack [380]) or opened from a location (File>Open Stack [380]). Once an available page stack is present within the main application window, it can then be edited or used straight away to control the automatic playout of pages from the current job and any referenced stills/images.

Pages can be dragged from the Page Browser [251] to a page stack entry for the relevant channel and then manipulated within the stack at will. Pages, still and images can also be inserted using the Insert/Edit Stack Entry dialog box [672] which can be displayed using Edit>Insert Entry [388] or Edit>Edit Entry [388]. Using the methods described, playout order can be built quickly which can differ radically from the default page order shown in the Page Browser [251]/Page List [252].

Creating a page stack is a non-destructive process i.e pages referenced by the stack are not changed in any way. Once a stack is complete, it can be used by the software to control playout by checking the Use Stack box on the Playout Controls [343].

The Channel columns shown reflect those channels available with your system or software. The display of available columns can be toggled using commands in the View [427] menu. The Control column can be used to control how page stack entries are layered for each row on multiple channel systems. Use of the Any Channel column enables channel selection for each entry to be dictated by the operator during playout.

The appearance of the current page stack including the columns shown and whether thumbnails and page names are

shown by each stack is configured using commands in the View ⁴²⁷ menu. The commands in the View menu are different from those shown when working with a job.

Editing of page stack entries (cut, copy and paste etc.) and the insertion/deletion of rows etc. is actioned using commands in the Edit ³⁸⁸ menu. The commands in the Edit menu are different from those shown when working with a job. Editing and manipulation can also be achieved by using the mouse or keyboard shortcut key combinations.

Once page stacks have been created, they can be saved (as .PPS files) for future recall (File>Save Stack As ³⁸¹) for use with the same job or as a template for use with other jobs. The page stack functionality is available with any CG Tools software derivative.

SEE ALSO

View menu ⁴²⁷
Edit menu ³⁸⁸

6.10.5.1 Page Stack sequences

A page stack sequence is defined as a contiguous number of pages stack entries, separated from another contiguous number of pages, by a row entry that features ONLY an entry in the Control column (e.g. Stop ⁶⁷², Layer Channel 1 Over 2 ⁶⁷² etc.). Any page stack sequences created using this method can then be referenced by an entry in the Control column, specifying the sequence to play out ⁶⁷¹. This means that you do not have to repeatedly create the same playout order if you need it more than once during playout. A page sequence referenced by an entry in the Control column is looped during playback until a Stop entry is encountered in the page stack.

6.10.6 Control boxes

Control boxes provide access to grouped software functionality. They are similar to dialog boxes, but they remain in view at all times whilst working within the work area. New or edited control boxes since the last release are highlighted with dark grey shading. The following control boxes are available:

Control box	Purpose	Clarity Only
Audio Meters ³²⁷	Monitor system audio levels.	■
Data Store Viewer ³²⁹	Enables the viewing of current data stores, their parameters and the data contained within them. See Data Stores ⁴⁶⁸ for more information.	
Global Fields Manager ³³³	Control field data entry, data connection and the linking of global fields to page template fields.	
GPI Source Status ³⁴⁰	Monitor system GPI connections.	■
Layer Tree ³⁴¹	Shows how page elements are currently layered on the current page and enables the display and selection of available page elements.	
Playout Controls ³⁴³	Control playout of pages whilst online.	
Playout File Output ³⁴⁷	Record CG output from the UI playback channel to a number of media file formats.	
Preview Window(s) ³⁵⁰	Preview CG output.	
Ramcorder ³⁵¹	To be completed at a later date. <PAW>	
Styles/Logos ³⁵¹	Alternative way of viewing user defined styles, logos and logo fonts used in the current job.	
Timecode Source Status ³⁵³	Monitor system timecode source connections.	■
Timeline ³⁵⁵	View and control page content and playback graphically via a timeline.	
Voice-Over Controls ³⁵⁸	Record voice over clips for selected pages.	■
VTR Control Dialog ³⁵⁹	Control and record to/from connected VTR(s).	■

The control boxes listed above can be displayed or hidden using the View ⁴²¹ menu (except for the Styles/Logos control box which is displayed/hidden using the Float button on the Graphic Tools User Defined Styles control tab ²⁹⁸, Logos control tab ²⁸⁹ and Logo Fonts control tab ²⁸⁷).

6.10.6.1   Audio Meters [CLARITY]

A range of audio meters can be displayed enabling the monitoring of audio signals input or output to/from the current system unit.

- To display the Input Audio Meters and Output Audio Meters control boxes, select <u>View></u> |421 <u>Audio Meters</u> |423|. The Input Audio Meters control box and Output Audio Meters control box are displayed.

  By default, no meters are shown on each control box.
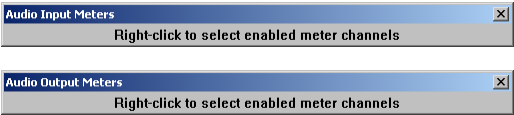
Access to displayed meters is via a shortcut menu. To display the shortcut menu, right-click on the grey area on the relevant Audio Meter control box. Meters are shown using the selected metering convention and applicable settings. These can be configured using the <u>Meters/Test Tone dialog sub-tab</u> |702| on the <u>Audio dialog tab</u> |697| on the <u>Local Preferences dialog box</u> |696| (<u>Options></u> |429| <u>Local Preferences</u> |696|). The status of input and output audio signals being monitored by the selected meters are shown <u>using three indicators</u> |329|.

SEE ALSO

<u>Input Audio Meters shortcut menu</u> |327|
<u>Output Audio Meters shortcut menu</u> |328|
<u>Audio metering</u> |445|
<u>Audio metering status</u> |329|
<u>Digital</u> |446|
<u>PPM (Peak Program Meters)</u> |446|
<u>VU (Volume Unit)</u> |446|

NOTE

Only available when using a Clarity system unit.

Not available when using Clarity PREP.

6.10.6.1.1   Input Audio Meters shortcut menu

The following audio input meters and configuration are available.

Command	Description	Availability	
		Single channel	Dual channel
All Input Meters	Toggle display of all available input meters for current system.	■	■
All Embedded Input Meters	Toggle display of all available embedded audio input meters for current system.	■	■
All AES/EBU Meters	Toggle display of all available AES/EBU audio input meters for current system.	■	■
Sort By Video Channel	Toggle grouping of available audio input meters by video channel association.	■	■
Embedded A(V) 1/2	Toggle display of audio input meter for Channel A 1st stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled VID IN.	■	■
Embedded A(V) 3/4	Toggle display of audio input meter for Channel A 2nd stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled VID IN.	■	■
Embedded A(K) 1/2	Toggle display of audio input meter for Channel A 1st stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled KEY IN.	■	■

Embedded A(K) 3/4	Toggle display of audio input meter for Channel A 2nd stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled KEY IN.	▪	▪
Embedded B(V) 1/2	Toggle display of audio input meter for Channel B 1st stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled VID IN.		▪
Embedded B(V) 3/4	Toggle display of audio input meter for Channel B 2nd stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled VID IN.		▪
Embedded B(K) 1/2	Toggle display of audio input meter for Channel B 1st stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled KEY IN.		▪
Embedded B(K) 3/4	Toggle display of audio input meter for Channel B 2nd stereo pair of embedded audio from one of the four available embedded audio groups input via BNC connector labelled KEY IN.		▪
AES/EBU A 1/2	Toggle display of audio input meter for Channel A 1st stereo pair.	▪	▪
AES/EBU A 3/4	Toggle display of audio input meter for Channel A 2nd stereo pair.	▪	▪
AES/EBU B 1/2	Toggle display of audio input meter for Channel B 1st stereo pair.		▪
AES/EBU B 3/4	Toggle display of audio input meter for Channel B 2nd stereo pair.		▪

6.10.6.1.2   Output Audio Meters shortcut menu

The following audio output meters and configuration are available.

Command	Description	Availability	
		Single channel	Dual channel
All Output Meters	Toggle display of all available output meters for current system.	▪	▪
All Embedded Output Meters	Toggle display all available embedded audio output meters for current system.	▪	▪
All AES/EBU Meters	Toggle display all available AES/EBU audio output meters for current system.	▪	▪
Sort By Video Channel	Toggle grouping of available audio output meters by video channel association.	▪	▪
Embedded A(V) 1/2	Toggle display of audio output meter for Channel A 1st stereo pair of embedded audio from one of the four available embedded audio groups output via BNC connector labelled VID OUT.	▪	▪
Embedded A(V) 3/4	Toggle display of audio output meter for Channel A 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via BNC connector labelled VID OUT.	▪	▪
Embedded B(V) 1/2	Toggle display of audio output meter for Channel B 1st stereo pair of embedded audio from one of the four available embedded audio groups output via BNC connector labelled VID OUT.		▪
Embedded B(V) 3/4	Toggle display of audio output meter for Channel B 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via BNC connector labelled VID OUT.		▪
AES/EBU A 1/2	Toggle display of audio output meter for Channel A 1st stereo pair.	▪	▪
AES/EBU A 3/4	Toggle display of audio output meter for Channel A 2nd stereo pair.	▪	▪
AES/EBU B 1/2	Toggle display of audio output meter for Channel B 1st stereo pair.		▪
AES/EBU B 3/4	Toggle display of audio output meter for Channel B 2nd stereo pair		▪

| Analogue A 1/2 | Toggle display of audio output meter for Channel A analogue monitoring stereo pair. | ■ | ■ |
| Analogue B 1/2 | Toggle display of audio output meter for Channel B analogue monitoring stereo pair. | | ■ |

6.10.6.1.3   Audio metering status

The status of input and output audio signals is shown by three indicators on all available meter types ⁴⁴⁵.
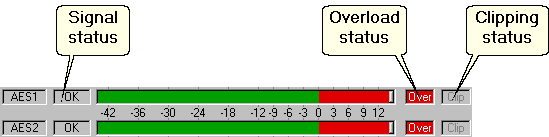
Signal status indicator

The table below describes the possible status messages that can be displayed for input and output audio signals.

ID	Background Colour	Description	Input Meters	Output Meters
Disc	Grey	Input/output source disconnected (for embedded inputs/outputs this means audio extraction/insertion not enabled for this channel).	■	■
ERR	Red	I/O error on this input/output source.	■	■
Sync	Orange	Input or output source is trying to synchronise (appears on start-up, after changing I/O delay settings, or after a video reference re-synchronise).	■	■
Unlock	Orange	Input source appears to be unlocked with respect to video sync.	■	■
OK	Grey	Input/output source is functioning properly.	■	■
REC	Grey	Recording is taking place from this input source.	■	
Mute	Orange	Current page has the Mute channel output audio when page is active ⁷⁵⁴ box checked on the Audio dialog tab ⁷⁵² on the Page Settings dialog box ⁷⁵¹.	■	■
Duck	Blue	One of the audio sources feeding this output is currently ducked (only displayed when ducking is enabled in the mixer feeding this output).	■	■

Overload status indicator

The Overload status indicator illuminates in situations where the metered audio signal exceeds the threshold defined using the Overload at text box on the Meters/Test Tone dialog sub-tab ⁷⁰² on the Audio Setting dialog tab ⁶⁹⁷ on the Local Preferences dialog box ⁶⁹⁶.

Clipping status indicator

The Clipping status indicator illuminates in situations where the metered audio has been determined, by the internal software metering algorithm, to have been clipped during analogue to digital conversion or during recording.

SEE ALSO

Digital ⁴⁴⁶
PPM (Peak Program Meters) ⁴⁴⁶
VU (Volume Unit) ⁴⁴⁶

6.10.6.2   Data Store Viewer

The Data Store View control box enables the viewing of current data stores, their parameters and the data contained within them. See Data Stores ⁴⁶⁸ for more information.

- To display the Data Store Viewer control box, select View> ⁴²¹ Data Store Viewer ⁴²³. The Data Store View control box is displayed.
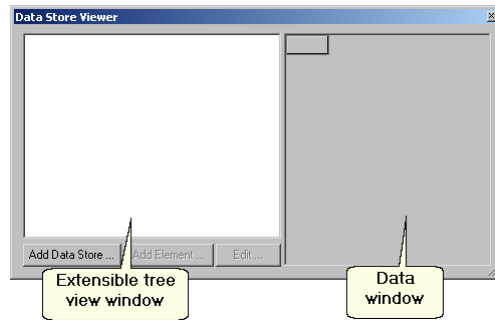
The image below shows the Data Store Viewer control box populated by a single Data Store.
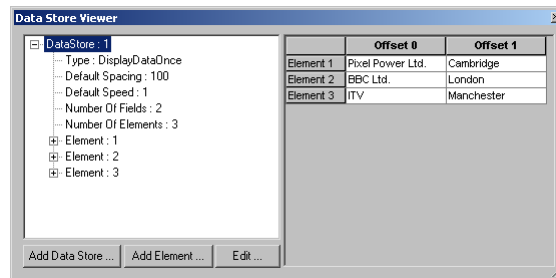
The image below shows the Data Store Viewer control box populated by a single Data Store, with Element 1 expanded to show its details.
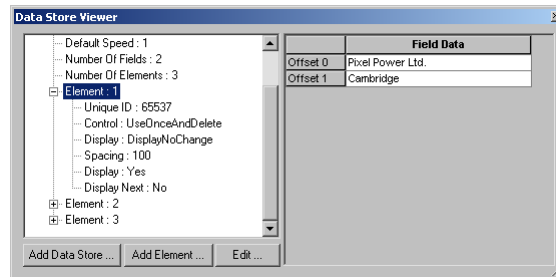
The Data Store Viewer control box can be resized to show more data within the Data window by dragging the button right-hand corner using the mouse.

Extensible tree view window

This window displays the available Data Stores and any elements contained within them. Element properties can be expanded or closed.

Data window

The window displays differing data depending on whether a Data Store is selected or an element is highlighted.

- If a Data Store is highlighted, field offsets for each available element and the field data contained within each offset is displayed. Data can entered or edited simply by clicking within an entry and typing.
- If an element is highlighted, available field offsets for highlighted element and the field data contained within each offset are displayed. Data can entered or edited simply by clicking within an entry and typing.

Add Data Store button

Click on Add Data Store to display the Add Data Store dialog box 331 where you can add a new Data Store for the current job.

Add Element button

Select Add Element to display the Add Element dialog box 332 where you can add a new element to the selected Data

Store.

Edit button

Select Edit to display either the Add Element dialog box 332 where you can edit an existing element or the Add Data Store dialog box 331 where you can edit an existing Data Store.

SEE ALSO

Please refer to the specifications for the Clarity COM interfaces, the Clarity Socket Interface and the Clarity Serial XML protocol for more information on the functionality available.

6.10.6.2.1   Add Data Store dialog box

Enables the addition and editing of Data Stores. The Add Data Store dialog box is displayed when the Edit or Add Data Store button is selected on the Data Store Viewer control box 329.
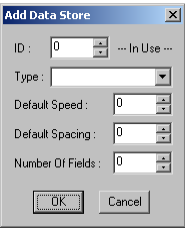
The following controls are available:

ID increment box

`(nnnnnn)`

Specific unique Data Store ID. This MUST be unique and can be up to 6 digits long.

Type drop-down list box

`(DisplayDataMany, DisplayDataOnce)`

The following Data Store types are available.

Type	Description
DisplayDataMany	Display data many times.
DisplayDataOnce	Display data once.

Default Speed increment box

`(+/- n)`

Positive or negative speed in pixels per field. This value is only limited by what the system can playout.

Default Spacing increment box

`(n)`

Display spacing between elements in pixels. This value is only limited by what the system can playout.

Number Of Fields increment box

`(n)`

The default number of field offsets automatically configured for any subsequent elements that are added to the Data Store.

6.10.6.2.2   Add Element dialog box

Enables the addition and editing of elements within the current selected Data Store. The Add Element dialog box is displayed when the Edit or Add Element button is selected on the Data Store Viewer control box 329 .
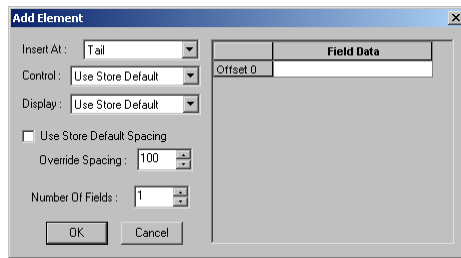
The following controls are available:

Insert At drop-down list box

```
(Head, Tail)
```

Enables the selection of where the element is inserted into the current Data Store.

Insertion position	Description
Head	Insert element in front of the first element in the current Data Store.
Tail	Insert element behind the last element in the current Data Store. This is the default setting which is used if the `Position` tag is not supplied when updating the Data Store remotely using the XML protocol.

Control drop-down list box

```
(Use Store Default, Use Once And Delete, Use Once And Keep, Use Many, Use When Empty)
```

Enables the selection of how the element is used by the current Data Store during playout.

Control type	Description
Use Store Default	Use the default setting for the selected Data Store type or the setting specified when updating the Data Store remotely using the XML protocol.
Use Once And Delete	The element is used once and then the `Display` attribute of the element is set to `Store` so that it will not be displayed again until told to.
Use Once And Keep	The element is used once and is then deleted from the Data Store. This is the default setting for `DisplayOnce` 331 type Data Stores.
Use Many	The element continues to be used only until told not to. This is the default setting for `DisplayMany` 331 type Data Stores.
Use When Empty	The element is used only when the Data Store runs out of data to display.

Display drop-down list box

Enables the selection of when the element is displayed by the current Data Store.

Display type	Description
Use Store Default	Use the default setting for the selected Data Store type or the setting specified remotely when updating the Data Store remotely using the XML protocol.
Display Later	The element is not be displayed until subsequently told to do so.
Display In Sequence	The element gets played out in its natural sequence. This is the default setting that will be used if the `Display` tag is not found when updating the Data Store remotely using the XML protocol.
Display Next	The element gets played out next. This attribute does not need to be used with this command. The same effect can be obtained by setting the Insert At setting to `Head`.

Use Store Default Spacing check box

Check the Use Store Default Spacing box to ensure that the element uses the default spacing configured for the current Data Store.

Override Spacing increment box

If the Use Store Default Spacing box is cleared, specify a override spacing value in pixels using the Override Spacing increment box.

Number Of Fields increment box

Specify the number of field offsets available for the current element using the Number Of Fields increment box. The default value is configured using the Add Data Store dialog box.

Data window

The Data window displays the available field offsets for the current element and the field data contained within each offset. Data can entered or edited simply by clicking within an entry and typing.

6.10.6.3   Global Fields Manager

The Global Fields Manager control box provides comprehensive control over global field data that links to page template fields that have been inserted into text pages. At a glance, the Global Fields Manager control box enables:

a)   the viewing of fields groups, all individual global fields, global field associated data and field descriptions;
b)   global field data and descriptions to be edited individually;
c)   global fields to be linked/un-linked to a remote data source |336| e.g. Microsoft Excel or Microsoft Access;
d)   replacement of paths |339| that reference a remote data source;
e)   global field data to be imported |338| or exported |339| (.FSF);
f)   global field structures to be imported |339| or exported |339| (.FDF);
g)   ranges of global fields to be grouped |337|;
h)   the storing and updating of all global fields in the current job.

- To display the Global Fields Manager control box, select View> |421| Global Fields Manager |424|. The Global Fields Manager control box is displayed.
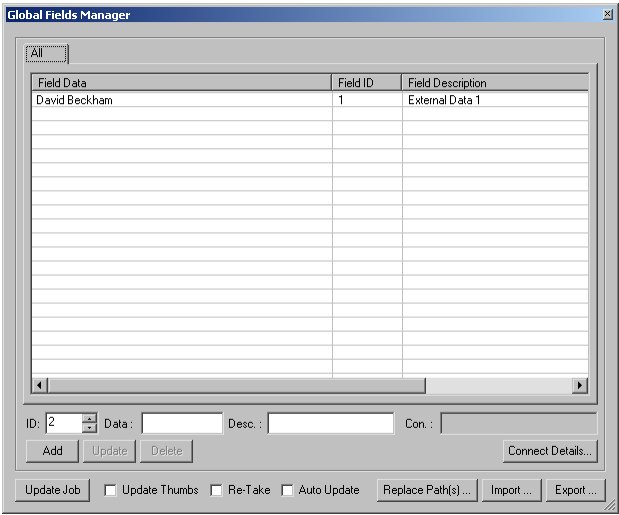
To enable all information to be viewed in the <Global Field> display window, you can resize the Global Fields Manager control box using the mouse by dragging the bottom right corner of the control box.

Add button

Select the Add button to add a global field to the All control tab.

Auto Update check box

By default, (with the Auto Update box checked) if global fields are connected to a remote data source (e.g. Microsoft Excel spreadsheet), when changes are made to data within cells in the spreadsheet, these changes are immediately passed through to BOTH the Global Fields Manager user interface (<Global Field> display window) AND any page template fields in templates within the current job. If it desirable for change to ONLY be reflected by the Global Fields Manager user interface, ensure that the Auto Update check box is cleared. Page template fields within text pages can be updated when required using the Update Job button.

Con box

If the selected global field is connected to a remote data source (e.g. Microsoft Excel spreadsheet), brief details of the file, path, cell references and machine name are shown in the Con box. This information is replicated in the Remote Connection column in the <Global Field> display window.

Connect Details button

Select the Connect Details button to configure the remote data connection for the selected global field. The Connection Details dialog box [336] is displayed.

Data text box

Enter new or edit exiting data for the selected global field. Field data may be automatically supplied via a data connection (see Connect Details button).

Delete button

Select Delete to delete the selected global field from the All control tab.

Desc text box

Enter new or edit an exiting description for the selected global field. A description may be automatically supplied via a data connection (see Connect Details button).

Export button

Once all global field entries and groups have been added using the Global Fields Manager control box, you can save either the global field numbering and grouping structure to a .FSF (Field Structure File) file or global field data to an .FDF (Field Data File) file. Select the Export button to export the current field structure or data. The Save As dialog box [339] is displayed.

<Global Field> display window

This window displays global field groups. By default, the All control tab is always displayed. The All control tab displays all global fields available to the system. Subsequent global field groups that are added appear as separate control tabs, in the same way as the All tab shown by default. Groups are configured using the Global Field Groups Manager dialog box [337]. This can be displayed by positioning the pointer over a control tab name (use the All tab if no other groups have been defined) and then right-clicking the mouse and selecting Edit Groups from the shortcut menu that appears.

Each control tab features the following columns:

Column	Description
Field ID	Unique ID of global field.
Field Data	Data contained within the global field (configured using the Data text box or supplied via a data connection).
Field Description	Field description (configured using the Desc. text box).
Remote Connection	If the global field is configured to be updated from an external data source then this column displays the connection type.

ID increment box

Specify a global field ID to edit by entering a field number or use the increment and decrement buttons to jog the value up or down on.

Import button

Saved .FSF (Field Structure Files) or .FDF (Field Data Files) can be imported if the global field structure or data for the current job becomes corrupted of you want use the structure or data as basis for a new template job. Select the Import button to import saved field structures or data. The Open dialog box [338] is displayed.

Replace Path(s) button

If you have linked global fields to data source that reference an MS Excel spreadsheet or MS Access database etc., if the location of the file has changed, you can change the path that locates the file so that it updates all global fields at the same time with the revised location. Select the Replace Paths button to display the Replace Paths dialog box 339.

Re-Take check box

When storing and updating fields, the software can optionally re-take the page currently being aired if any global field data on that page has changed. Check the Re-take box to ensure that the software re-takes any pages that have been changed that are currently playing out.

Update button

Select Update to modify the selected global field with new settings configured using the Data and Desc text boxes.

Update Job button

At any time whilst working on a template job, you can store and update any changes made to the global field structure (additional or deleted fields/groups), data or descriptions or to reflect changes made to linked external data. Select the Update Job button to store/update the global field and group structure/data.

Update Thumbs check box

When storing and updating global fields, the software can optionally update the thumbnail previews of pages shown in the Page Browser 251. Check the Update Thumbs box to ensure that the software updates page thumbnail previews in the Page Browser.

6.10.6.3.1   Browse for alternative <file type> dialog box

Enables the selection of an alternative file that will supply data to global fields.
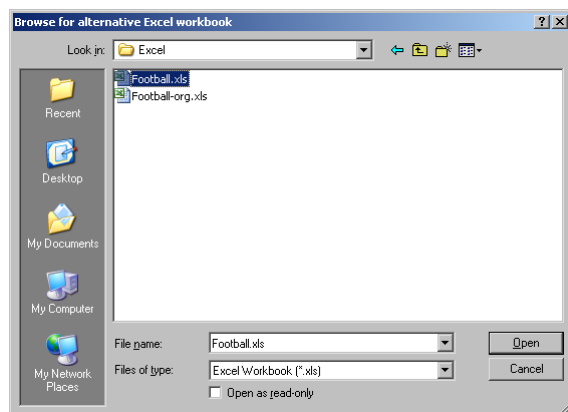
1. Browse to location where the file is located.
2. Select the desired file.
3. Select Open to open the selected file and return to the Replace Paths dialog box 339.

335   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.10.6.3.2   Connection Details dialog box

The Connection Details box enables global fields to be linked to external data sources. The Connection Details dialog box is displayed when the Connect Details button is selected on the Global Fields Manger control box 333 .
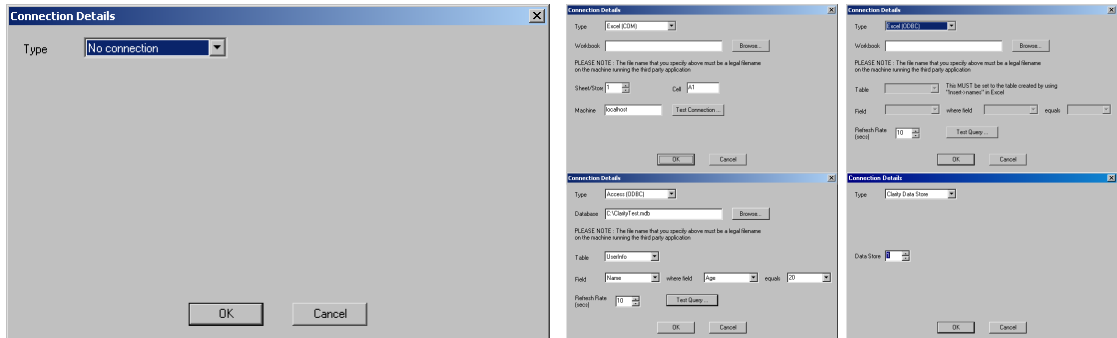
Global fields can be optionally linked to data stored in either a Microsoft Excel spreadsheet or an Access database.

Microsoft Excel spreadsheet data can be linked using a COM (Component Object Model) or ODBC (Open Database Connectivity) connection. A Microsoft Access database can only be linked using an ODBC connection.

Global fields can also be linked to Clarity Data Stores. Data Stores are repositories of XML data that can be used by template fields within Clarity template pages. They are effectively internal data arrays within the Clarity system from which data for template fields may be taken. Data Stores are often used to update template fields within continuous ticker animations with different iterations of data over time. Click here 468 to learn more about Data Stores.

Type drop-down list box

```
(No Connection, EXCEL_COM, ACCESS_ODBC, EXCEL_ODBC, Clarity Data Store)
```

With a global field selected, select the data connection type. Controls on the dialog box are shown to reflect your selection.

Apply Changes button

Select the Apply Changes button to apply the selected data connection settings to the global field.

Connection dependant settings

EXCEL_COM	*This is by far the most intelligent of the links because it does not have to poll for changes. When a cell is changed within the Excel spreadsheet, the application receives notification of this and updates the value.*
Control	**Description**
Machine text box	Any machine on the network can be used to run the Excel spreadsheet. A workbook can be specified but is not necessary since the currently loaded workbook will be used. Click on Browse to browse for a machine on the local area network. If machine is set to `localhost` then the local machine is used.
Workbook text box	Specify the name of the Excel workbook.
Sheet increment box	Specify the sheet number within the selected Excel workbook.
Cell text box	Specify the cell reference of the cell containing the desired data.

ACCESS_ODBC	*With an ODBC connection, the application polls for changes in the specified database. The user must specify a database, a table, a refresh rate (which is global to the system) and a query such as "Age" where "Name" equals "20".*
Control	**Description**
Refresh Rate increment box	Specify the refresh rate in seconds for the data connection.
Database text box	Specify the name of the Access database. Click on Browse to browse for a database on the local machine or on a machine on the local area network.
Table drop-down list box	Specify the table within the selected Access database.

ACCESS_ODBC	*With an ODBC connection, the application polls for changes in the specified database. The user must specify a database, a table, a refresh rate (which is global to the system) and a query such as "Age" where "Name" equals "20".*
Field drop-down list box	Specify the field within the selected Access database.
Where field drop-down list box	Specify the first part of the query.
Equals drop-down list box	Specify the second part of the query.
Test Query button	Test the query using the current configuration details.

Excel_ODBC	*This is much the same as Access (ODBC), except that a special group table is required. Each column in the Excel spreadsheet must be named (using the first entry in that column) and there must be a special group table that groups all the columns that you are interested in.*
Control	**Description**
Refresh rate increment box	Specify the refresh rate in seconds for the data connection.
Workbook text box	Specify the name of the Excel workbook. Click on Browse to browse for a Excel workbook on the local machine or on a machine on the local area network.
Table drop-down list box	Specify the table within the selected Excel workbook.
Field drop-down list box	Specify the field within the selected Excel workbook.
Where field drop-down list box	Specify the first part of the query.
Equals drop-down list box	Specify the second part of the query.
Test Query button	Test the query using the current configuration details.

Clarity Data Store	*Data Stores are repositories of XML data that can be used by template fields within Clarity template pages. They are effectively internal data arrays within the Clarity system from which data for template fields may be taken. Data Stores are often used to update template fields within continuous ticker animations with different iterations of data over time. Click* here 468 *to learn more about Data Stores.*
Control	**Description**
Data Store increment box	Specify the ID of the Data Store. *Data Stores are created in numerical sequence. Within each Data Store, you can store elements.*
Field Offset increment box	Specify the field offset. *Each element can store multiple data offsets (fields) which are numerically sequenced from zero.*
Apply data store settings to next 'N' fields check box	Check this box to apply the same settings to the next N fields as configured in the adjacent increment box.

6.10.6.3.3 Global Fields Groups Manager dialog box

Groups are configured using the Global Field Groups Manager dialog box.

- To display the Global Field Groups Manager dialog box, positioning the pointer over a control tab name (use the All tab if no other groups have been defined) and then right-click the mouse and select Edit Groups from the shortcut menu that appears.
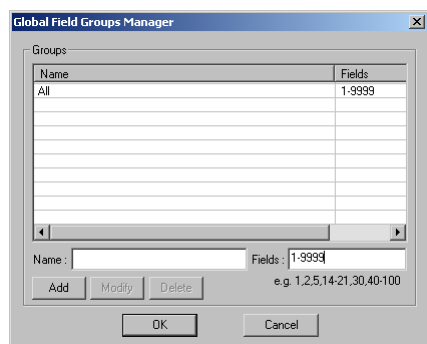
<Groups> display window

This window displays any global field groups that have been configured and the global fields that apply to each group. The <Groups> display window features the following columns:

Column	Description
Name	User defined group name
Fields	Global fields that apply to the user defined group.

Name text box

Enter the name for a new group. You cannot edit the name of existing groups.

Add button

Select the Add button to add the group to the <Groups> display window.

Modify button

Select the Modify button to modify the selected group with new settings configured using the Fields text box.

Delete button

Select the Delete button to delete the selected group from the <Groups> display window.

Fields text box

Specify the field range that you want to associate with the group. The field range conventions that apply are similar to those used when printing from Windows applications, examples of which are shown below:

Range	Description
1,2,5	Only fields 1, 2 and 5 are included in the group.
14-21	Fields 14 up to and including 21 are included in the group.
30	Only field 30 is included in the group.
40-100	Fields 40 up to and including 100 are included in the group.

6.10.6.3.4   Open dialog box

Saved .FSF (Field Structure Files) or .FDF (Field Data Files) can be imported if the global field structure or data for the current job becomes corrupted of you want use the structure or data as basis for a new template job.

- To display the Open dialog box, select Import on the <u>Global Fields Manger control box</u> ³³³.
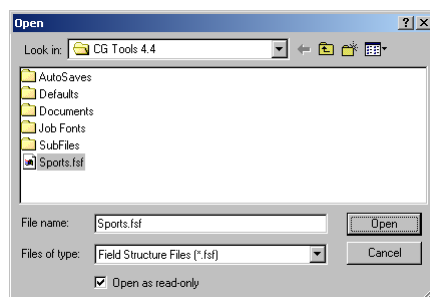
1. Browse to the location where the file is saved, then select the file from the file list.
2. Click on Open to close the Open dialog box and load the file.

6.10.6.3.5   Replace Paths dialog box

If you have linked global fields to remote data sources (e.g. MS Excel spreadsheet or MS Access database etc.), if the location of the file has changed, you can change the path that locates the file so that it updates all global fields at the same time with the revised location.

- To display the Replace Paths dialog box, select Replace Path(s) on the Global Fields Manger control box 333.
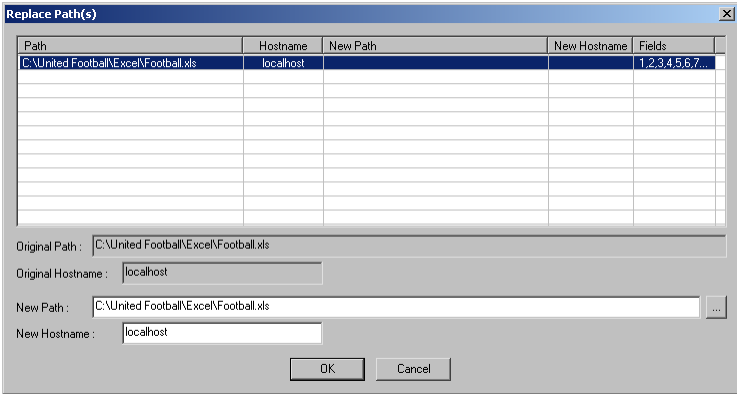
<Paths> display window

This window displays any files used in the current job that supply remote data to one or more global fields. The <Groups> display window features the following columns:

Column	Description
Path	File path that locates the file supplying data to global fields.
Hostname	DNS hostname of the machine hosting the file.
New Path	New file path that locates the file supplying data to global fields
New Hostname	New DNS hostname of the machine hosting the file.
Fields	Global field(s) that connect to the referenced file.

Original Path box

For the selected entry in the <Paths> display window, displays the current file path that locates the file supplying data to global fields.

Original Hostname box

For the selected entry in the <Paths> display window, displays the current DNS hostname of the machine hosting the file.

New Path text box and browse button

Enter a new path that will locate the file supplying data to global fields. Alternatively, select the adjacent browse button to display the Browse for alternative <file type> dialog box 335 where you can browse and select a new file in the normal Windows manner.

New Hostname text box

Enter the new DNS hostname of the machine that is hosting the file specified using the New Path text box.

6.10.6.3.6   Save As dialog box

Once all global field entries and groups have been added using the Global Fields Manager control box, you can save either the global field numbering and grouping structure to a .FSF (Field Structure File) file or global field data to an .FDF (Field Data File) file.

- To display the Save As dialog box, select Export on the Global Fields Manger control box 333.

339   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
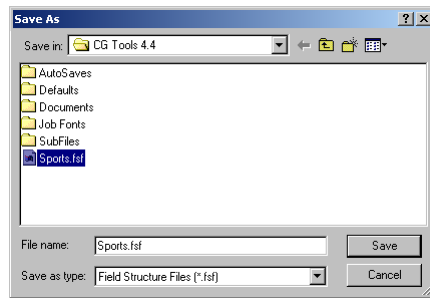
1. Browse to the location where the file is to be saved.
2. Enter the name of the file in the File Name text box.
3. Select either .FSF (Field Structure File) or .FDF (Field Data File) from the Save as type drop-down list box.
4. Select Save to close the Save As dialog box and save the file.

6.10.6.4   GPI Source Status [CLARITY]

The GPI Source Status control box enables the monitoring of system GPI connections. Useful in fault finding circumstances.

- To display the GPI Source Status control box, select <u>View></u> 421 <u>GPI Source Status</u> 424. The GPI Source Status control box is displayed.
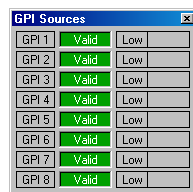
Each playout channel available with your system features four available GPI's and as such a two channel system features eight available GPI's (as shown above). Information regarding how GPI's are made physically available on your system is documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

The validity or availability of GPI's is indicated by the Green/Red Valid/Invalid boxes.

Condition	Description
GREEN/Valid	The related GPI is available (present) on your system.
RED/Invalid	The related GPI is not available (present) on your system.

The condition of available GPI's is indicated by the High/Low boxes.

Condition	Description
Low	The related GPI pin is Low.
High	The related GPI pin is High (active).

NOTE

Only available when using a Clarity system unit.

Not available when using Clarity PREP or Colette for Collage.

6.10.6.5 Layer Tree

The Layer Tree control box shows how page elements are currently layered on the current page and enables the display and selection of available page elements.

- To display the Layer Tree control box, select <u>View></u> [421] <u>Layer Tree</u> [423]. The Layer Tree control box is displayed.
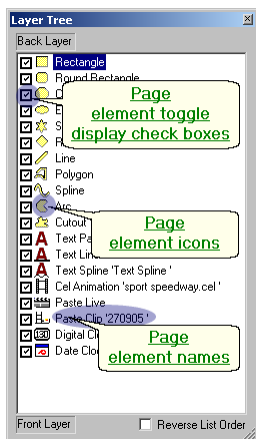
  Click on a balloon to find out more (online documentation only).

The Layer Tree control box lists all page elements contained on the page currently open for editing in the <u>Graphic Edit window</u> [260]. The order of page elements shown by the Layer Tree control box is a direct representation of how the elements are layered on the page. The Layer Tree control box can be resized by dragging the bottom right corner. The majority of Layer Tree configuration is achieved using the <u>shortcut menu</u> [342] which can displayed by right-clicking on a page element within the Layer Tree window.

SEE ALSO

<u>Changing the order of page elements</u> [341]
<u>Page element toggle display check boxes</u> [341]
<u>Page element icons</u> [342]
<u>Page element names</u> [342]
<u>Reverse Order check box</u> [342]
<u>Shortcut menu</u> [342]

6.10.6.5.1 Changing the order of page elements

The order of page elements can be manipulated using the simple drag-and-drop technique. Simply select a page element using the right mouse button, hold down the right mouse button and then drag the element to a new position. The new layer order will be reflected by the <u>Select Graphic drop-down list box</u> [315] on the <u>Graphic Tools</u> [266]. You can also reverse the order in which the entire layer tree is displayed using the <u>Reverse Order check box</u> [342].

NOTE

You can also reverse the order in which the entire layer tree is displayed using the <u>Reverse Order check box</u> [813] in the <u>Layer Tree group box</u> [813] on the <u>Edit dialog tab</u> [810] on the <u>User Preferences dialog box</u> [809].

6.10.6.5.2 Page element toggle display check boxes

A check box precedes every page element. Check or clear a box to toggle the display of the adjacent page element in the Graphic Edit window. Page elements can also be displayed or hidden using the Visible, Show All and Hide All commands in the <u>shortcut menu</u> [342].

341   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

6.10.6.5.3 Page element icons

Next to each toggle display check box |341⟩ is an appropriate icon which identifies the type of page element object. These icons correspond to the icons used on the Graphic Tools toolbar |315⟩ and toolboxes, thus enabling consistent identification. If a page element has been locked from editing using the Locked or Lock All commands in the shortcut menu |342⟩, then its icon will be appended as shown below:

☑Ⓐ Text Page

6.10.6.5.4 Page element names

Next to the appropriate icon is the name of the page element. The name is usually the page element type, matching the name of the menu entry or tool that was used to create the object. Text objects and clocks also display the first line of text or time when the clock was created. Video clips, cel animations and cutouts also display the relevant filename. Page elements can be renamed using the Rename command in the shortcut menu |342⟩. They can also be renamed in the same way as folders and files in Windows Explorer by extending the click duration when selecting a page element. Page elements that have been renamed can have their name reverted back to the default name using the Restore Auto Name command in the shortcut menu |342⟩.

6.10.6.5.5 Reverse List Order check box

If desired, you can reverse the order in which the entire layer tree is displayed. By default, the first element shown in the Layer Tree control box is the top layer in the Graphic Edit window |260⟩. If the Reverse List Order check box is checked, then the first element shown in the Layer Tree control box is then the bottom layer in the Graphic Edit window. This check box is also mirrored in the Layer Tree group box |813⟩ on the Edit dialog tab |810⟩ on the User Preferences dialog box |809⟩.

6.10.6.5.6 Shortcut menu

If you right-click within the Layer Tree window, a shortcut menu is displayed containing the following commands. New or edited menu commands since the last release are highlighted with dark grey shading.

Command	Function
Visible	Make the selected page element visible within the Graphic Edit window |260⟩. The adjacent toggle display box is checked |341⟩.
Show All	Show all available page elements on the current page in the Graphic Edit window |260⟩. All toggle display boxes are checked |341⟩.
Hide All	Hide all available page elements on the current page in the Graphic Edit window |260⟩. All toggle display boxes are cleared |341⟩.
Invert Visible	Invert the state of visible page elements, hiding previously visible elements and subsequently showing previously hidden elements.
Locked	Lock the current page element on the current page from editing. Indicated by a change in icon state |342⟩. Page elements are only locked after they have been de-selected and pasted into the foreground of the page.
Lock All	Lock all available page elements on the current page from editing. Indicated by a change in icon state |342⟩. Page elements are only locked after they have been de-selected and pasted into the foreground of the page.
Unlock All	Unlock all available page elements on the current page, thus enabling them to be edited. Indicated by a change in icon state |342⟩.
Invert Locks	Invert the state of locked page elements, unlocking previously locked elements and subsequently locking previously unlocked elements.
Rename	Rename the selected page element. Subsequently changes the page element name throughout the GUI (e.g. Select Graphic drop-down list box |315⟩ on the Graphic Tools |266⟩).
Restore Auto Name	Revert the name of the selected page element back to its default name.
Add to Edit Group	Add selected page element to group already selected in the Graphic Edit window |260⟩.
Delete	Delete the selected page element from the current page.

6.10.6.6   Playout Controls

The Playout Controls control box enables the control of page playback whilst online.

- To display the Playout Control control box, select <u>View></u> ⌐421⌐ <u>Playout Controls</u> ⌐424⌐. The Playout Control control box is displayed.

   Click on a balloon to find out more (online documentation only).
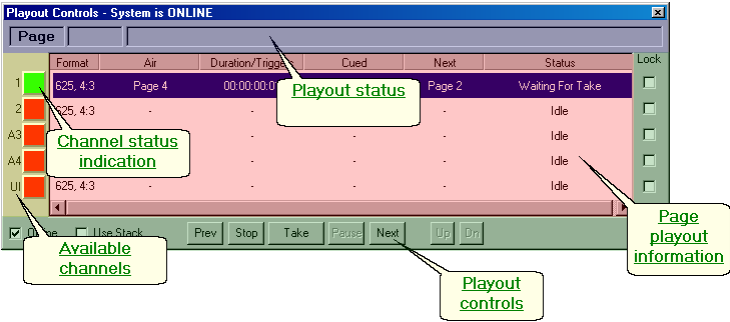
The name of the user that is currently logged in is displayed in the bottom right-hand corner of the control box. The <u>Status message window</u> ⌐346⌐ can also be shown below the Playout controls control box if the <u>View></u> ⌐421⌐ <u>Status Messages</u> ⌐427⌐ command is selected.
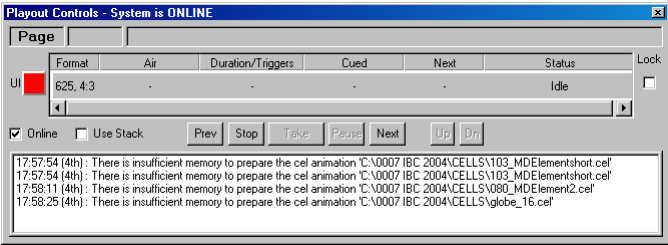
Under normal circumstances, the desired page number is entered using the numeric keypad and then cued. This prepares the page in question. A preview is displayed in a scalable window on the user monitor. When the page is shown in the relevant channel preview window, selection of the Take control or a Take keypress transfers it to the live Program output.

NOTE

If the Playout Controls control box is not currently displayed, when a Cue action is initiated, the Playout Controls control box is automatically shown, thus ensuring that playout status information can be viewed.

6.10.6.6.1   Available channels

The available channels for you system are identified on the left side of the Playout Controls control box. Up to a possible five channels are available, depending on your system specification. If you are using only software without hardware (Clarity PREP or Clarity Plugin), then only the UI channel will be available for selection.

Channel	Automation system channel ID	Description	Clarity	Clarity PREP and Clarity Plugin
1	1	Channel 1	■	
2	2	Channel 2	■	
A3*	3	Channel 1's auxiliary channel.	■	
A4*	4	Channel 2's auxiliary channel.	■	
UI	5	User interface (software based) channel.	■	■

NOTE*

Only available when using a dual channel Clarity system unit in conjunction with either of the following options:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not supported on this channel) (Clarity 200 and 300 systems only) (requires Video clip and auxiliary output option).

6.10.6.6.2   Channel status indication

In conjunction with the page playout information area (red shaded), the channel status indication area also assists the operator by displaying the status of available channels using simple icons.

Indicator		Status description
Grey		Channel is offline.
Grey with red 'E'		Channel is offline and being used for edit output.
Red		Idle, nothing prepared and nothing playing out.
Yellow and red stripes		Preparing page.
Green		Page prepared; waiting for take.
Orange		Page taking.
Orange with a clock face		Page take is being delayed by particular time interval (delay or timecode).
Orange with a white hand		Take is waiting for a user trigger of some kind.
Yellow with red 'P'		Page is paused.
Red with white cross		Error on channel.
Red with padlock		Channel is locked.

6.10.6.6.3   Page playout information

Page playout information is shown in the central area of the Playout Controls control box. This area provides the main source of information for the operator on the current status of each available channel whilst the system is online.

Column	Variables	Example	Description
Format	`<page video format>`	525, 625	Video format of selected channel Configured using Video Format drop-down list [795] in the System Settings group box [794] on the SD Hardware Configuration dialog box [786].
	`<page aspect ratio>`	4:3, 16:9	Aspect ratio of selected channel. Configured using Aspect Ratio group box [791] in the Chan A/B dialog tab [790] on the SD Hardware Configuration dialog box [786].
Air	`<page or still name>`	Page 1, 4678	Current aired page or still.
	`<string from first text page>`	In the news today...	
	`<user defined string>`	News Template 213	
Duration/Triggers	`<page duration in hh:mm:ss:ff>`	00:00:00:05	Duration of page.
	`<page triggers>`	1,2,3	Page triggers featured on page.
Cued	`<default page or still name>`	Page 1, 4678	Current cued page or still.
	`<string from first text page>`	In the news today...	
	`<user defined string>`	News Template 213	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   344

Copyright © 2000-2006 Pixel Power Ltd.

Column	Variables	Example	Description
Next	`<page/still name>`	Page 1, 4678	Next page or still.
	`<string from first text page>`	In the news today...	
	`<user defined string>`	News Template 213	
Status	`Idle`		Currently idle.
	`Waiting For Take`		Awaiting a take.
	`Waiting In Take`		Awaiting an IN take for an animation (user trigger of some kind).
	`Waiting Out Take`		Awaiting an OUT take for an animation (user trigger of some kind).
	`Delaying Take`		Take is being delayed by particular time interval (delay or timecode).

Whilst online, if a page containing triggers is on-air, trigger keys cannot work if a page is open for editing in the Graphic Edit window 260 and a text element on that page is selected. This is due to the keypress being interpreted by the text element being edited. When a text element is selected and it contains a trigger, the current playout channel is highlighted red in the Page playout information area. A warning message is added to the title bar 346 of the Playout Controls control box. Also, if you have selected to keep online cued pages visible and have checked the Auto Select Online Aired Page box 678 on the Job List View - Display options dialog box 677, when triggers cannot be sent to one of the on-air channels, the page is highlighted red in the Page List 252.

SEE ALSO

Page Settings dialog box 751
SD Hardware Configuration dialog box 786

6.10.6.6.4   Playout controls

The playout controls provide the operator with control over the operation of each available playout channel.

Component	Keyboard Shortcut			Description
	Operator key	+ Standard keyboard key	+ Version 2 RapidAction Keyboard Key	
Online check box				Toggle between Online and Offline mode.
Use Stack check box				Toggle the use of the current page stack to control playout if available.
Prev button	Left CTRL +	PgDn	Prev	Prepare the previous page.
Stop button	Left CTRL +	END	Stop	Stop playout.
Take button		Numeric keypad ENTER	Take	Take currently prepared page.
Pause button	Left CTRL +	HOME	Pause	Pause playout (e.g. foreground rolls, crawls, animation or cel animations).
Next button	Left CTRL +	PgDn	Next	Prepare the next page.
Up button	Left CTRL +	INSERT	Faster	Increase speed of foreground rolls, crawls, animation or cel animations.
Dn button	Left CTRL +	DELETE	Slower	Decrease speed of foreground rolls, crawls, animation or cel animations.
Lock check box(es)				Lock related adjacent channel, preventing any user control over the channel and thus prevent accidental disruption to playback if the channel is under automation control.

6.10.6.6.5   Playout status

The playout status area at the top of the Playout Controls control box displays the page or still number you have entered using the numeric keypad and any resulting messages that may be shown after trying to take or cue the page or still number.

Component	Variables	Description
Playout mode	`PAGE`	Normal operating mode where pages are cued and taken using either the numeric keypad, a connected RapidRecall keypad or by a connected automation system.
	`STACK`	The [Use Stack check box](#) 345 has been checked and the system is utilising the current page stack to control page playout.
Page Number box	`<nnnn>`	Displays page or still number entered using numeric keypad, connected RapidRecall keypad or supplied by a connected automation system.
	`SHADED RED`	• You have tried to enter a page or still number using the numeric keypad whilst the NUM LOCK function is turned off. • The page or still requested does not exist.

Message box	`Num Lock is turned off.`
	 `No page number has been`
	 `selected`
		• You have tried to enter a page or still number using the numeric keypad whilst the NUM LOCK function is turned off.

	`No content exists at` `specific index`	• The page or still requested does not exist. • The page requested does not match the video/aspect ratio for the current channel.

6.10.6.6.6   Status message window

Displays status messages whilst online during page preparation and playout. The Status message window can be displayed by selecting [View>](#) 421 [Status Messages](#) 427. Under normal conditions, no status messages should appear. Messages are usually related to problems that the system is experiencing during the preparation and playout of pages. Associated files that cannot be located on the current page are also listed in this window. See [Playout Control control box](#) 343 for an illustration.

6.10.6.6.7   Title bar

Displays a message showing whether the system is currently online or offline.

Message	Description
`System is ONLINE`	System is currently online.

`System is ONLINE - WARNING Unable to`
 `Accept Trigger Keys Whilst Editing a`
 `Page`
	Whilst online, if a page containing triggers is on-air, trigger keys cannot work if a page is open for editing in the [Graphic Edit window](#) 260 and a text element on that page is selected. This is due to the keypress being interpreted by the text element being edited. When a text element is selected, this warning message is added to the title bar of the Playout Controls control box. Additionally, if the selected text element contains a trigger, the current playout channel is highlighted red in the [Page playout information](#) 344 area. Also, if you have selected to keep online cued pages visible and have checked the [Auto Select Online Aired Page box](#) 678 on the [Job List View - Display options dialog box](#) 677, when triggers cannot be sent to one of the on-air channels, the page is highlighted red in the [Page List](#) 252.

`System is OFFLINE`	System is currently offline.

6.10.6.7 Playout File Output

The Playout File Output control box enables the software to go online and output a job to a variety of media file types in the same way that you would output to hardware if you were using a Clarity system unit.

- To display the Playout File Output control box, select View> [421] Playout File Output [424]. The Playout File Output control box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
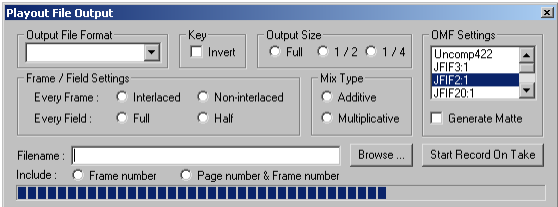
You can output a movie/media sequence to a variety of file formats or to a native a Clarity clip.

- Rendering a page or sequence of pages to a Clarity clip can be useful if you want to collapse layered, complex animated pages which then can be inserted as a clip into a new page background, over which more animated graphics can be placed.
- Rendering a page or sequence of pages to a movie or media sequence can useful if you want to collapse layered, complex animated page which can then be used with a software application of your choice e.g. Avid .OMF movies for use with Avid Media Composer, Symphony etc. Job content can be previewed and distributed for a variety of purposes. These may include editorial review or promotional use.

6.10.6.7.1 Frame/Field Settings group box

If you selected to record to a movie or image sequence file format, the controls in the Frame/Field Settings group box enable you to specify frame and fields settings that apply to the generated output.

Settings	Description
Interlaced	Each frame of the generated output is interlaced. One file is created per frame, with each frame containing both fields.
Non-Interlaced	Each frame of the generated output is non-interlaced. The first field of each frame will be saved. One file is created per frame.
Full	Each frame of the generated output contains full resolution fields. Two full frame resolution files are created for each frame.
Half	Each frame of the generated output contains half resolution fields. Two half frame resolution files are created for each frame.

NOTE

The controls in the Frame/Field Settings group box are not available when you have selected Clarity Clip from the Output File Format drop-down list box [349].

6.10.6.7.2 Filename text box

The Filename text box and Browse button enable you to specify the clip, movie or image sequence that you want to save to.

1. If you are saving a new clip, movie file or first file in an image sequence, enter the proposed path and filename of the file in the Filename text box. For clips, this will be a path to a clip on the local clip store. Alternatively, select Browse to browse to a location where you want to save the clip, movie or image sequence. If you are overwriting or saving a new image sequence, you must select or specify a valid starting file for the sequence that you want to save. There are conventions [500] which the software will follow when naming (saving) subsequent files in an image sequence.

   After selecting Browse, the Save As dialog box is displayed if saving a movie or image sequence. If you have selected the Clarity Clip format in the Output File Format drop-down list box [349], then the Clarity Explorer [370] is

displayed, showing only available clip stores on the local machine and NOT the entire local file system.
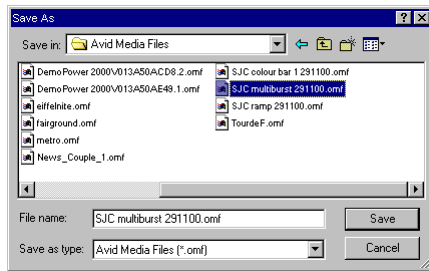
2. Browse to the location where an existing file is located or where you want to save a new clip, movie or image sequence.
3. For movie file and image sequences, select the movie file or sequential file in a image sequence that you want to overwrite. If saving a new movie file or image sequence, enter the name of the movie or first file in an image sequence file in the File Name text box. If you are overwriting or saving a new image sequence, you must select or specify a valid starting file for the sequence that you want to save. There are conventions 500 which the software will follow when naming (saving) subsequent files in an image sequence.
    For clips, select the clip that you want to overwrite. If saving a new clip, enter the name of the clip in the File Name text box in the Clarity Explorer 370.
4. Select OK to close the Clarity Explorer or Save to close the Save As dialog box and revert back to the Playout File Output control box. A message may appear asking whether you want to overwrite the existing file. Select Yes to proceed with the operation or Cancel to abort.

6.10.6.7.3   Include options

If you selected to record an image sequence file format, you must select either of the following options:

Setting	Description
Frame Number	Specifies that frame numbers are appended to filenames in the image sequence. This is in addition to the conventions 500 which the software will follow when naming (saving) subsequent files in an image sequence.
Page Number & Frame Number	Specifies that both page AND frame numbers are appended to filenames in the image sequence. This is in addition to the conventions 500 which the software will follow when naming (saving) subsequent files in an image sequence.

NOTE

The Include options are not available when you have selected Avid Media File (.OMF), Windows Media (.AVI) or Clarity Clip from the Output File Format drop-down list box 349.

6.10.6.7.4   Invert check box

If you selected to record to a movie or image sequence file format, the Invert check box in the Key group box enables you to specify whether to invert the key of the frames contained within the movie or image sequence. Check the Invert box to invert the key as each frame is generated.

NOTE

The Invert check box is not available when you have selected Clarity Image Format (.PPI) or Clarity Clip from the Output File Format drop-down list box 349.

6.10.6.7.5   Mix Type group box

If you selected to record to a movie or image sequence file format, the controls in the Mix Type group box enable you to specify the type of mixing that frames are saved with.

Setting	Description
Additive	Specifies that frames are converted to additive mixing before being saved.
Multiplicative	Specifies that frames are converted to multiplicative mixing before being saved.

See the Cel Playback Settings control tab [274] for more information on Additive and Multiplicative keying.

NOTE

The controls in the Mix Type group box are not available when you have selected Windows Media (.AVI) or Clarity Clip from the Output File Format drop-down list box [349].

6.10.6.7.6   OMF Settings group box

If you selected to record an Avid Media File (.OMF) file, the OMF Output list box enables you to specify an output sub format (compression). You can also specify whether to generate additional matte files when saving an Avid Media File (.OMF) file.

Select the desired format from the list. The selection of a format will ultimately depend on the compression format that you are using with your Avid Symphony or Media Composer system. Check the Generate OMF Matte File box to generate an additional matte file for the saved Avid Media File (.OMF) file. This file can be used by Avid systems to produce the correct keying effect for the associated Avid Media File (.OMF).

NOTE

The OMF Output list box and Generate OMF Matte File box are only available when you have selected Avid Media File (.OMF) from the Output File Format drop-down list box [349].

6.10.6.7.7   Output File Format drop-down list box

The Output File Format drop-down list box enables you to specify the file type of the movie or image sequence that you want to output to. Using the Output File Format drop-down list box, select the file format of the movie or image sequence that you want to save.

File Format	Type	Extension	Configuration Available				
			Key [348]	*Output Size* [349]	*OMF Settings* [349]	*Frame settings* [347]	*Mix Type* [348]
Avid Media File	Movie	.OMF	■		■		■
Clarity Image Format	Image Sequence	.PPI		■			
Clarity Clip	Native Clip	.PPV					
JPEG Bitmap	Image Sequence	.JPG		■			■
Apple QuickTime (see Note)	Movie	.MOV	■	■			■
SGI Targa Bitmap	Image Sequence	.TGA	■	■			■
Targa Bitmap	Image Sequence	.TGA	■	■			■
Tagged Image File Format	Image Sequence	.TIFF	■	■			■
Windows Bitmap	Image Sequence	.BMP	■	■			■
Windows Media File	Movie	.AVI	■	■			■

NOTE

In order to output to the Apple QuickTime format, you must have a copy of the latest version of the Apple QuickTime Player installed. This means that you will have the latest codecs installed to ensure the best possible output. See http://www.apple.com/quicktime/win.html for more information and downloads.

6.10.6.7.8   Output Size group box

If you selected to record to a movie or image sequence file format, the controls in the Output Size group box enable you to specify the scaling ratio of the frames in the movie or image sequence that you want to save. The higher the scaling ratio, the smaller the generated file(s) will be (in total bytes). Using the 1:1, 1:2 and 1:4 radio buttons, select the desired scaling ratio.

This functionality is primarily for use when generating Windows Video (.AVI) files. The controls in the Output Size group box are only available when saving to a movie or image sequence file format.

NOTE

The controls in the Output Size group box are not available when you have selected Avid Media File (.OMF) or Clarity Clip from the Output File Format drop-down list box 349.

6.10.6.7.9   Start Record on Take button

Once you have configured settings on the Playout File output control box, select the Start Record On Take button.

At this point, the selected clip, movie file or first file in the image sequence will be created in the specified location. No output is generated within this first file until playback commences. If you have selected to output to the Apple QuickTime format (.MOV), then the Compression Settings dialog box 599 is displayed.

Subsequent actions and recording are dependant on the content and structure of pages that you are playing out.

Population of the destination file(s) will begin after a Take keypress, irrelevant of whether the first page is configured to wait for a take or has a delay. Recording is continued until a page is reached that is formatted with a wait for take. At this point recording is stopped and user control is re-instated over the CG Tools user interface.

6.10.6.8   Preview Window(s)

The Channel Preview window(s) provide a static preview of currently prepared pages on any of the available channels.

- To display the available Channel Preview window(s), select View> 421 Preview Window(s) 424. The available preview windows for your system will be displayed. If they are hidden behind other parts of the user interface, use the commands in the Window 435 menu to bring a selected preview window to the front.
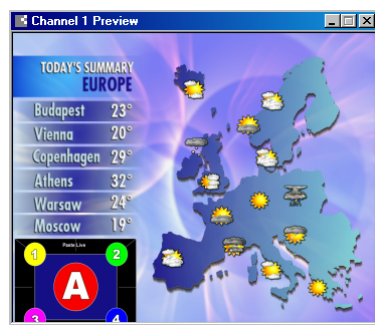
Standard   **Extended information**
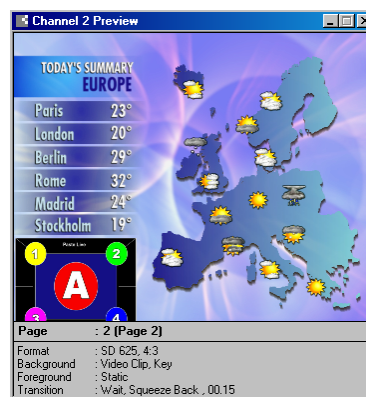
When a page on a selected channel is prepared, by default, the preview shown by the related Preview window is a representation of how the page appears when it is opened for editing in the Graphic Edit window 260. If desired, you can select a user defined frame from the selected pages' playback that will be shown in the Preview window(s) whilst the page is being prepared. This frame can be set using the Page> 390 Set Page Preview Name 395 command or from the Timeline control box 355.

Preview windows can be scaled to suit your requirements; simply drag the corner of the window diagonally using the mouse to resize it. The following preview windows are available and are dependant on your systems' characteristics.

Window	Description	Clarity	Clarity PREP and Clarity Plugin
Channel UI Preview	Preview for the user interface (software based) channel.	■	■
Channel 1 Preview	Preview for Channel 1.	■	
Channel 2 Preview	Preview for Channel 2.	■	
Channel A3 Preview*	Preview for Channel 1's auxiliary channel.	■	
Channel A4 Preview*	Preview for Channel 2's auxiliary channel.	■	

Preview windows can also display extended information about pages. This can be toggled on or off using the Display preview information check box 718 on the General dialog tab 714 on the Local Preferences dialog box 696. This setting can only be changed when no job is currently open.

NOTE*

Only available when using a dual channel Clarity system unit in conjunction with either of the following options:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not supported on this channel) (Clarity 200 and 300 systems only) (requires Video clip and auxiliary output option).

6.10.6.9   Ramcorder

To be completed at a later date.

```
IDD_RAMCORDER
```

\<PAW\>

6.10.6.10   Styles/Logos

The Styles/Logos control box was implemented as alternative way of viewing user defined styles, logos and logo fonts used in the current job. The control box is split into three separate control tabs, mirroring the functionality offered by the User Defined Styles control tab 298, Logos control tab 289 and Logo Fonts control tab 287 on the Graphic Tools 266. The advantage of displaying the Style/Logos control box is that the control box is permanently displayed, thus enabling you to gain access to styles, logos and logo fonts more easily.

- To display the Styles/Logos control box, select the Float button on either the User Defined Styles control tab 298, Logos control tab 289 and Logo Fonts control tab 287 on the Graphic Tools. The Styles/Logos control box is displayed.
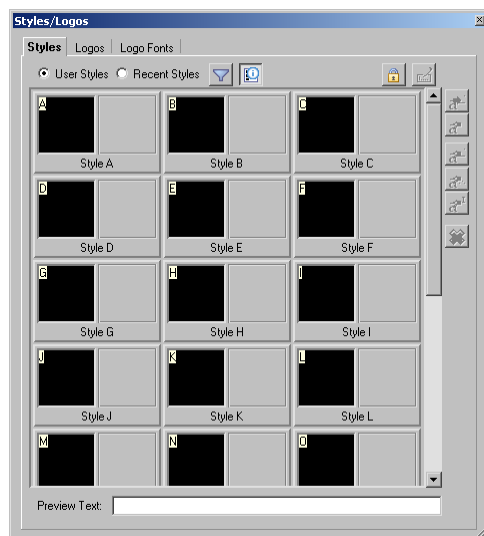
To close the Styles/Logos control box and re-instate the User Defined Styles control tab 298, Logos control tab 289 and Logo Fonts control tab 287 on the Graphic Tools 266, select the Close button in the top-right corner of the control box.

SEE ALSO

Logo fonts control tab 352
Logos control tab 352
Styles control tab 353

6.10.6.10.1 Logo Fonts control tab

The Logo Fonts control tab enables the creation and editing of logo fonts and subsequent selection of a logo to insert into a text page. The controls on the Logo Fonts control tab mirror exactly those found on the Logo Fonts control tab [287] on the Graphic Tools [266].

NOTE

To close the Styles/Logos control box and re-instate the Logo Fonts control tab [287] on the Graphic Tools [266], select the Close button in the top-right corner of the control box.

6.10.6.10.2 Logos control tab

The Logos control tab enables the definition, editing and insertion of logos. The controls on the Logos control tab mirror exactly those found on the Logos control tab [289] on the Graphic Tools [266].

NOTE

To close the Styles/Logos control box and re-instate the Logos control tab [289] on the Graphic Tools [266], select the Close button in the top-right corner of the control box.

6.10.6.10.3   Styles control tab

The Styles control tab enables up to:

- 26 user defined styles to be created, stored and applied explicitly by the user;
- 16 recently used styles to be automatically stored, tracked and listed in order of use during text styling.

The controls on the User Defined Styles control tab mirror exactly those found on the User Defines Styles control tab 298 on the Graphic Tools 266.
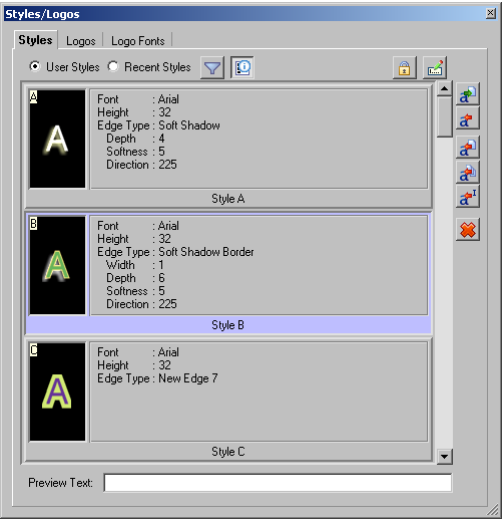
NOTE

To close the Styles/Logos control box and re-instate the User Defines Styles control tab 298 on the Graphic Tools 266., select the Close button in the top-right corner of the control box.

6.10.6.11   Timecode Source Status [CLARITY]

The Timecode Status control box displays the current timecode status for each available source. Useful in fault finding circumstances.

- To display the Timecode Status control box, select View> 421 Timecode Source Status 424. The Timecode Status control box is displayed.
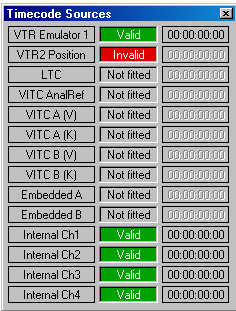
The following timecode sources may be available with your system:

Source	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
VTR Emulator 1	When the Clarity VTR port is set up to emulate a VTR under the control of a standard 9-pin edit controller, this represents the current emulated VTR position. See VTR Control Dialog control box [359] for more information.	VTR (15-pin female D-type RS422 serial RS-232/VTR/machine control)	GPIO/AUDIO/TALLY/LTC/RS-232/RS-422 (44-pin female HD D-type)
VTR Position 2	This is the timecode read by a VTR, and sent back to Clarity via the 9-pin VTR control interface. Clarity will request either VITC, LTC, or the best timecode available from the VTR, depending on the TC Request Mode setting for the VTR port. See VTR Control Dialog control box [359] for more information.	VTR (15-pin female D-type RS-232/RS422 serial VTR/machine control)	GPIO/AUDIO/TALLY/LTC/RS-232/RS-422 (44-pin female HD D-type)
LTC	The current SMPTE/EBU longitudinal timecode as read from the LTC pins on the relevant audio connector on the system rear panel.	AUDIO (15-pin female D-type digital audio port)	GPIO/AUDIO/TALLY/LTC/RS-232/RS-422 (44-pin female HD D-type)
VITC AnalRef	Current SMPTE/EBU vertical interval timecode read from the analogue reference input video on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	REF (75BNC Analogue reference input)	REF (75BNC Analogue reference input)
VITC A (V)	Current SMPTE/EBU vertical interval timecode read from Channel A's digital input video connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH A VID IN (BNC)	VID IN (BNC)
VITC A (K)	Current SMPTE/EBU vertical interval timecode read from Channel A's digital input key connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH A KEY IN (BNC)	KEY IN (BNC)
VITC B (V)	Current SMPTE/EBU vertical interval timecode read from Channel B's digital input video connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH B VID IN (BNC)	N/A, no second channel available
VITC B (K)	Current SMPTE/EBU vertical interval timecode read from Channel B's digital input key connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH B KEY IN (BNC)	N/A, no second channel available
Embedded A	*Not yet supported by Clarity.*	N/A	N/A
Embedded B	*Not yet supported by Clarity.*	N/A	N/A
Internal Ch1	When the current job is set to Internal Timecode page mode [244], the current timecode position of Channel 1.	N/A	N/A
Internal Ch2	When the current job is set to Internal Timecode page mode [244], the current timecode position of Channel 2.	N/A	N/A
Internal Ch3	When the current job is set to Internal Timecode page mode [244], the current timecode position of Channel 1's auxiliary channel.	N/A	N/A
Internal Ch4	When the current job is set to Internal Timecode page mode [244], the current timecode position of Channel 2's auxiliary channel.	N/A	N/A

Information regarding the pinouts of rear panel connectors featured in the table above are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

The validity and availability of timecode sources is indicated by the Green/Red Valid/Invalid/Not Fitted boxes.

Condition	Description
GREEN/Valid	Timecode is valid for the related source.
RED/Invalid	Timecode is invalid for the related source.
Not Fitted	The related source is not available (present) on your system.

NOTE

Only available when using a Clarity system unit.

Not available when using Clarity PREP or Colette for Collage.

6.10.6.12   Timeline

The Timeline control box enables the viewing, control and playback of page content via a timeline.

- To display the Timeline control box, select View> |421|Timeline |424|. The Timeline control box is displayed.

  Click on a balloon to find out more (online documentation only).
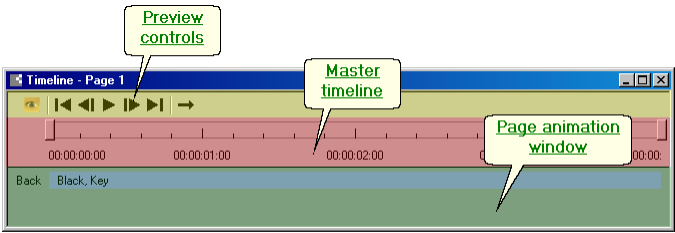
You can resize the Timeline control box using the mouse by dragging the any corner of the control box.

With the Timeline control box displayed, when pages are selected in the Page List |252| or Page Browser |251|, any animated graphic elements and the page background are shown as individual timelines within the Page animation window |357|. The Master timeline |356| can be used to zoom in or out on a particular portion of the current pages' duration, thus causing the master timeline scale and animation timelines within the Page animation window |357| to be re-calibrated.

Animation durations can be edited:

a)   interactively using the mouse by dragging an animation timelines' head, tail or middle;
b)   by double-clicking on the animation timeline related to the graphic element that you want to edit. If the page is not already open in the Graphic Edit window |260|, then it will be opened and the graphic element selected, ready for its animation settings to be edited.

Once animation timelines have been edited using the method above, the page can be previewed on the UI software playback channel available to all systems and then playback can be controlled using the Preview controls |356|. Additionally, you can select a user defined frame from the selected pages' playback that will be shown in the Preview window(s) |350| whilst the page is being prepared. When cueing pages, this functionality uses the software playout channel to render the correct preview frame and therefore the software playout channel must be available.

6.10.6.12.1 Preview controls

The Preview controls enable you to playback a page using the UI software playback channel [343]. Whilst the page is playing out you can monitor the position and timing of animated graphic elements on that page.

Control		Description
Preview On/Off		Put the CG Tools software online and ready the UI software playback channel for preview. At this point the scale below the master timeline [356] becomes the jog control and reverts to a slider bar.
First Frame		Move to the first frame of the pages' animation.
Jog Backwards		Jog backward though the timeline in increments of a single frame.
Play		Playback the page using the UI software playback channel. The page is opened in the Graphic Edit window [260] if not already open and playback begins.
Jog Forwards		Jog forwards though the timeline in increments of a single frame.
Last Frame		Move to the last frame of the pages' animation.
Loop Mode		Indicates that page playback will loop until stopped.
		Indicates that page playback will cycle once and then stop.
Set Page Preview		Sets the frame at the current master timeline position that will be used to preview the page when it cued for playback. Only available when page playback is being previewed (Preview On/Off). Displays the Set Playout Preview dialog box [800]. When cueing pages, this functionality uses the software playout channel to render the correct preview frame and therefore the software playout channel must be available.

6.10.6.12.2 Master timeline and scale
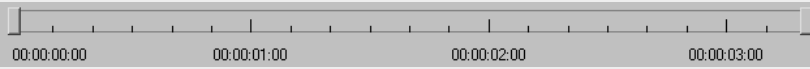
The master timeline enables to zoom in or out on a particular portion of the current pages' duration, thus causing the master timeline scale and animation timelines within the Page animation window [357] to be re-calibrated. It features a slider bar and a relative time scale below. When a page is previewed by selecting the Preview ON/OFF [356] or Play [356] control, the scale below the master timeline becomes the jog control and reverts to a slider bar. A red line passes though the Page animation window [357] to help positioning. Whilst previewing but not playing, you can slide the bar back and forth and the previewed animation will playback according to the direction of movement and speed.
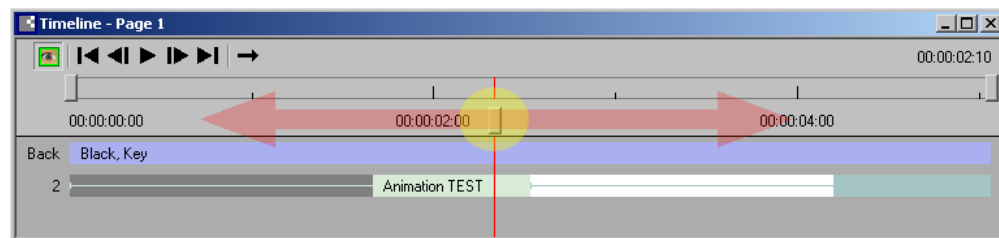
Manipulation of the master timeline causes a number of things to happen.

Timeline scale is re-calibrated

The scale shown below the timeline slider is re-calibrated to show the most relevant units of time. For example, if you shorten the visible duration of the page (drag the slider to the left), the scale is re-calibrated to increment time through from seconds to single frames.

Seconds	
Frames	

Page animation window timeline are re-calibrated

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   356

Copyright © 2000-2006 Pixel Power Ltd.

The timelines for any animated graphics elements that appear in the page animation window 357 are re-calibrated in relation to the updated units of time. For example, if you shorten the visible duration of the page (drag the slider to the left), the timelines for any animated graphics elements expand, thus enabling more accurate manipulation in conjunction with the revised timeline scale.
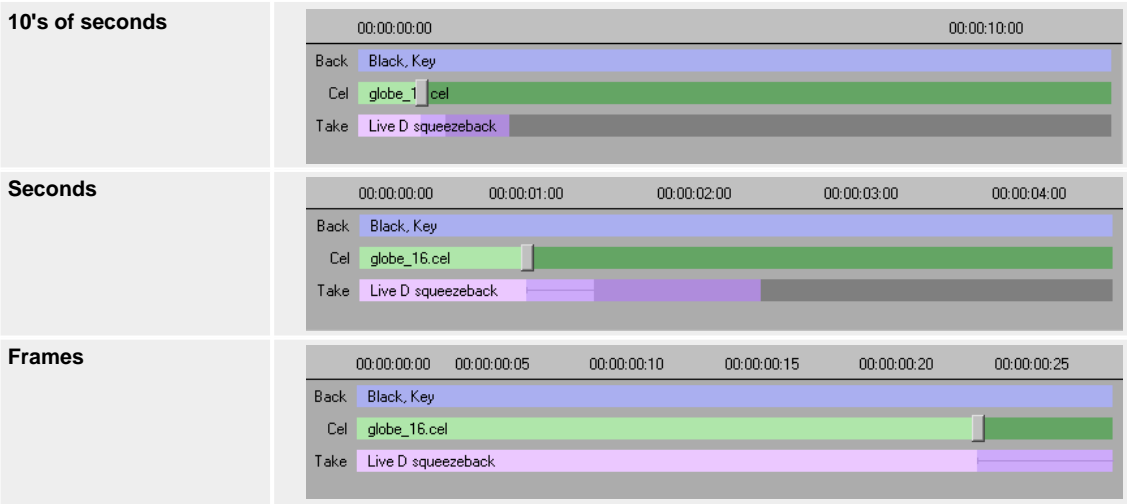
6.10.6.12.3   Page animation window

This page animation window displays the background and all animated graphics elements on the current page.

The only page background that features an editable timeline is a video clip background. All other background types are static. Backgrounds are always shown as the first timeline.

Animated page elements that can be displayed within the page animation window are listed below:

- pasted live objects formatted with a squeezeback trigger;
- foreground video clips;
- cel animations;
- any text within a text page or graphic element that is formatted with an animation marker.
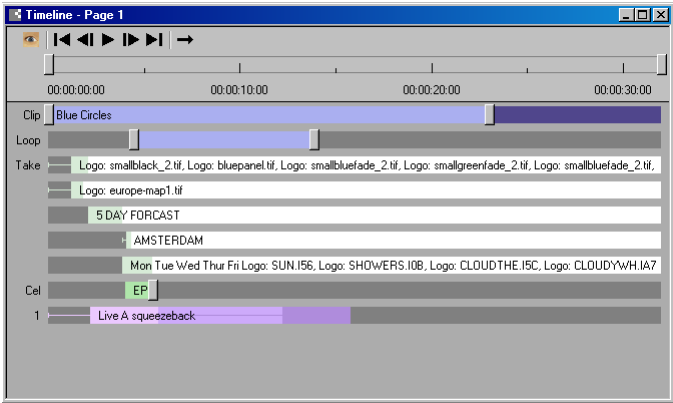
Both background and foreground video clips feature an additional loop timeline enabling looping to be configured. This resets the value for the clip configured using the Cel Animation\Video Clip Playout dialog box 587.

Description	ID	Timeline colour	Looping timeline available
Background or foreground video clip	CLIP		Yes
Cel animations	CEL		No

357   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Description	ID	Timeline colour	Looping timeline available
Any text within a text page or graphic element that is formatted with an animation marker	TAKE or <user defined keyboard key>		No
Pasted live objects formatted with a squeezeback trigger	TAKE or <user defined keyboard key>		No

6.10.6.13   Voice-Over Controls [CLARITY]

Voice overs can be recorded easily on a page-by page basis or for a sequence of pages that are separated with waits. Voice over audio clips can be recorded in either mono or stereo to an available clip store/volume. The recording of voice over audio clips for pages is achieved using the Voice Over Controls control box.

- To display the Voice Over Controls control box where page voice overs can be recorded, select View> 424 Voice-over Controls 424. The Voice Over Controls control box is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

SEE ALSO

Voice over overview 549
Voice over audio configuration 550
Voice-Over dialog tab [CLARITY] 820

NOTE

Only available when using a Clarity system unit.

Not available when using Clarity PREP.

6.10.6.13.1   Clip Name text box

Enter or edit the file path and name for the clip in the Clip Name text box or select Browse to display the Clarity Explorer 362 where you can browse to another location or select an existing clip. By default, after selecting a page number using the Page Number controls 359, the file path will default to the root of the clip drive volume. This will be truncated by the default filename of the clip in the form:

```
VO <JOBNAME><Pnnnnn>
```

where VO stands for voice over, <JOBNAME> is the entire job name, and <Pnnnnn> is the page number to which the voice over applies.

6.10.6.13.2   Cue button

Select Cue to start recording the voice over clip using the path and file name in the Clip Name text box. Once recording has begun, the red REC symbol is shown next to the Page Number controls 359. Recording will continue until the Stop button is selected or the end of a sequence of pages is reached that are separated with no waits (the Auto-stop recording on last page box 820 must be checked on the Voice-Over dialog tab 820 on the User Preferences dialog box 809).

6.10.6.13.3   Mute Backing Track check box

If any additional backing track audio clips are specified on the page to which the current voice clip is associated with, you can mute the playback of these audio clip(s) by ensuring that the Mute Backing Track box is checked.

6.10.6.13.4   Mute Voice-over check box

If you need to re-record the voice-over clip, after selecting the Cue button, the original voice clip is made into a temporary file and will be heard during recording, unless the Mute Voice-over box is checked. Once recording is stopped, the temporary file is overwritten with the new voice over clip and inserted as a track for the page background audio.

6.10.6.13.5   Page Number controls and increment box

Enter the page number to which you want to associate the voice over using the Page Number text box. Alternatively, use the arrow controls to advance through the available pages in the job. Notice that the filename in the Clip Name text box 358 is appended automatically to match the page number that you have selected.

6.10.6.13.6   Review button

To playback the voice over clip that you have just recorded, select Review. This in effect plays back the entire audio for the selected page or sequence of pages, including any backing audio tracks that will play alongside the voice over. This is so that you can audit the final effect. You can disable the playback of any background audio tracks on the current page using the Mute Backing Track check box 359.

6.10.6.13.7   Stop button

To stop playback or recording of the voice over clip listed in the Clip Name text box 358, select Stop.

6.10.6.14   VTR Control Dialog [CLARITY]

The VTR Control Dialog control box enables you to control a connected VTR.

- To display the VTR Control Dialog control box, select View> 421 VTR Control Dialog 424. The VTR Control Dialog control box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
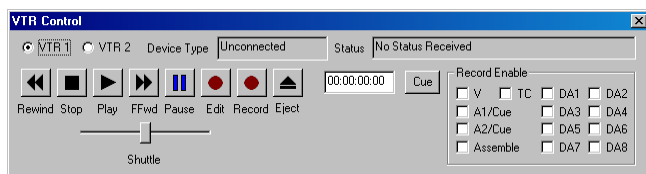
  Prior to controlling a connected VTR, VTR software settings can be configured using the Timecode/VTR dialog tab 732 on the Local Preferences dialog box 696 (Options> 429 Local Preferences 696).

NOTE

Additionally, the VTR Control Dialog control box 359 may be displayed in conjunction with the Get/Put Clip dialog box 646 when the Record from VTR / Timecode Source box 651 or Playback to VTR / Timecode Source box 651 is checked. In these situations, it will appear docked at the bottom of the dialog box to facilitate control of a connected VTR.

Only available when using a Clarity system unit.

Not available when using Clarity PREP.

6.10.6.14.1 Cue button and text box

Select Cue to cue the selected VTR to the timecode specified using the adjacent timecode text box. The VTR transport should rewind or forward the tape to the selected timecode position, ready for playback.

6.10.6.14.2 Device Type control

The device type (e.g. *Sony PVW2800P*) connected to the selected VTR port and its associated video format (e.g. 525 NTSC or 625 PAL) is displayed next to the Device Type control. If the device type cannot be interpreted, Unconnected is shown. The status of the connected device is shown by the Status control |361|.

6.10.6.14.3 Edit button

To start recording the connected VTR on the selected port, select Edit. The VTR transport initiates a record using the configuration set up using the Record Enable controls |360|.

6.10.6.14.4 Eject button

To eject the tape form the connected VTR on the selected port, select Eject. The VTR transport ejects the tape.

6.10.6.14.5 FFwd button

To fast forward the connected VTR on the selected port, select Ffwd. The VTR transport fast forwards the tape.

6.10.6.14.6 Pause button

To pause playback of the connected VTR on the selected port, select Pause. The VTR transport pauses playback of the tape.

6.10.6.14.7 Play button

To start playback of the connected VTR on the selected port, select Play. The VTR transport begins playback of the tape.

6.10.6.14.8 Record button

To start recording the connected VTR on the selected port, select Record. The VTR transport initiates a 'crash' record to the full width of the tape.

6.10.6.14.9 Record Enable controls

The controls in the Record Enable group box mirror the Insert and Assemble control button groups located on the respective VTR front panels (if available).

The DA1 to DA8 groups (digital audio stereo pairs) only apply to digital VTR's i.e. *Sony DVW-500P Digital Betacam Studio Recorder.*

It is important to note that the Clarity CANNOT read back from a connected VTR any local record enable settings configured using the VTR's front panel controls.

Because the Record Enable controls are intrinsically linked to recording video/audio/timecode back to a VTR from a Clarity system, these features are explained more fully in the section detailing the putting/getting of video and audio between a Clarity system and a connected VTR.

6.10.6.14.10 Rewind button

To fast rewind the connected VTR on the selected port, select Rewind. The VTR transport fast rewinds the tape.

6.10.6.14.11 Shuttle slider bar

To shuttle the connected VTR on the selected port, drag the Shuttle slider in the desired direction.

Replication of the jog functionality, available with most broadcast VTR's, is through the use of the wheel found on many PS/2 mice. To jog backwards, frame-by-frame, rotate the wheel incrementally away from you. To jog forwards, frame-by-frame, rotate the wheel incrementally towards you. Faster movement of the wheel will switch the connected VTR into shuttle mode.
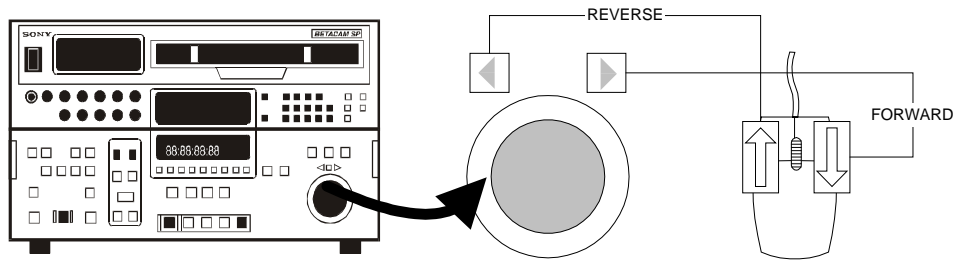
6.10.6.14.12 Status control

The status indicator displays information about the current status of the connected device type 360 and possible record settings configured using the Record Enable controls 360.

General Status

Message	Possible Additional Message	Description
No Status Received		No machine is connected, or it is not returning status.
Local		VTR is in local mode, so therefore cannot be controlled by Clarity.
No Tape Loaded		No tape loaded.
Rec Inhibit		Recording not allowed e.g tape write protected.

Edit Status

Message	Possible Additional Message	Description
Preroll		Preroll mode.
Preview		Preview mode.
Auto Edit		Automatic Editing mode.
Edit		Edit mode (servo not locked).
Edit	Lock	Edit mode (servo locked).

Record Status

Message	Possible Additional Message	Description
Insert		A combination of whichever tracks are enabled using either the Record Enable controls or local VTR settings
	TC	Timecode.
	V	Video.
	A1	Analogue audio 1.

Message	Possible Additional Message	Description
	A2	Analogue audio 2.
	DA1	Digital audio 1.
	DA2	Digital audio 2.
	DA3	Digital audio 3.
	DA4	Digital audio 4.
	DA5	Digital audio 5.
	DA6	Digital audio 6.
	DA7	Digital audio 7.
	DA8	Digital audio 8.
Assemble	TC V A1 A2 DA1 DA2 DA3 DA4 DA5 DA6 DA7 DA8	All the available tracks on the VTR will be shown.

Transport Status

Message	Possible Additional Message	Description
Standby		This will appear all the time the tape is threaded round the scanner.
Stop		Stop mode.

6.10.6.14.13 Stop button

To stop playback of the connected VTR on the selected port, select Stop. The VTR transport stops playback of the tape.

6.10.6.14.14 VTR 1 and 2 radio buttons

Depending on the settings configured using the Timecode/VTR dialog tab 732 on the Local Preferences dialog box 696, select the channel and VTR that you want to use using the available VTR 1 and VTR 2 radio buttons.

The selected port must be configured with a valid device using the VTR Port Usage drop-down list boxes 732 on the Timecode/VTR dialog tab 732.

NOTE

The number of channels and VTR's available for selection is dependant on the specification of the Clarity system unit that you are using.

6.10.7 Clarity Explorer

The Clarity Explorer is akin to the Microsoft Windows Explorer, but specifically for use within the CG Tools software. The Clarity Explorer can be shown by selecting File> 378 Clarity Explorer 382. Alternatively, select the Clarity Explorer tool from the Standard toolbar 247. It is also displayed throughout the CG Tools software on numerous occasions when access to stills, FTP servers and emulated/physical clip stores is required. For example, after selecting the Select Video or Select Video/Audio buttons on the Video Clip 759/Background dialog tab 756 on the Page Settings 751 dialog box.

With the Clarity Explorer displayed and a basic system configuration implemented, you can:

- browse the systems' local file system and available network drives (*My Computer*);
- browse the local emulated clip store (*Emul*) if it has been configured using the Clip Store Emulation dialog tab 710 on the Local Preferences dialog box 696;
- browse the local still store (*Stills*) and any stills folders within it that have been configured using the Still Store dialog tab 730 on the Local Preferences dialog box 696;
- browse any FTP servers that have been configured using the FTP dialog tab 713 on the Local Preferences dialog box 696.

More advanced use can be achieved with the additional configuration of one or more Clarity Servers. A Clarity Server

is a Clarity system or PC running the Clarity PREP software that is identified to another system using the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654]. Each Clarity system or Clarity PREP PC, running version 7.0.0.4 or later of the CG Tools software, stores configuration information, both about itself, and other Clarity Servers that have been made known to it. This information includes settings which indicate the directories used for storing jobs and job related content on that machine. See Intermediate level CG Tools user management, Clarity server and job copy configuration [128] for more information on Clarity Servers and the configuration of an example server workgroup.

With the local host Clarity Server and any additional Clarity Servers sufficiently configured, you can:

- browse a Clarity Servers' local physical clip store (if available; check availability using the Clip Availability group box [660] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654]);
- browse a Clarity Servers' emulated clip store (*Emul*) if it has been configured on that server locally using the Clip Store Emulation dialog tab [710] on the Local Preferences dialog box [696]. Must have been made accessible to the host Clarity Server by interpretation of a valid drive map configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654];
- browse the Clarity Servers' still store (*Stills*) and any stills folders within it that have been configured on that server locally using the Still Store dialog tab [730] on the Local Preferences dialog box [696]. Still store folders must have been made accessible to the host Clarity Server by interpretation of one or more valid drive maps configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654];
- browse one or more Clarity Server job paths (*<job path alias>*) and any sub-folders contained below these paths that have been configured on that server using the controls in the Job Path Configuration group box [661] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654]. Job paths must have been made accessible to the host Clarity Server by the interpretation of one or more a valid drive maps configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654].

The above functionality provided by the Clarity Server concept ultimately enables easier management of content stored on the local system and other Clarity systems in the workgroup. Also, in addition to the traditional job copy method (using the Copy Clarity Job dialog box [605]), you can now use the Copy and Paste shortcut menu commands [367] and the Copy and Paste tools on the Toolbar [365] to copy jobs between Clarity Servers that have been sufficiently configured.

NOTE

- The length of time that it takes for content available within a location to appear within the Clarity Explorer is dependant on both the type of remote location being accessed by the Clarity Explorer and how the location is connected (in particular content within Clarity Servers and FTP locations may take some time to appear).
- In order for Clarity Servers known to the local host to appear within the Clarity Explorer, you MUST check the Include this server in the clarity explorer window box [661] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654].
- In order to use the Clarity Server functionality, DCOM settings on the host Clarity Server and any remote Clarity Servers must be configured correctly. See Enabling DCOM for the CG Tools software application on HOST systems [1068] for more information.

SEE ALSO

Graphical User Interface (GUI) [364]
Available locations, colour coding of locations and location status [365]
Shortcut menus [367]

6.10.7.1 Graphical User Interface (GUI)

The Clarity Explorer is split into five distinct parts. Click on a balloon to find out more (online documentation only).
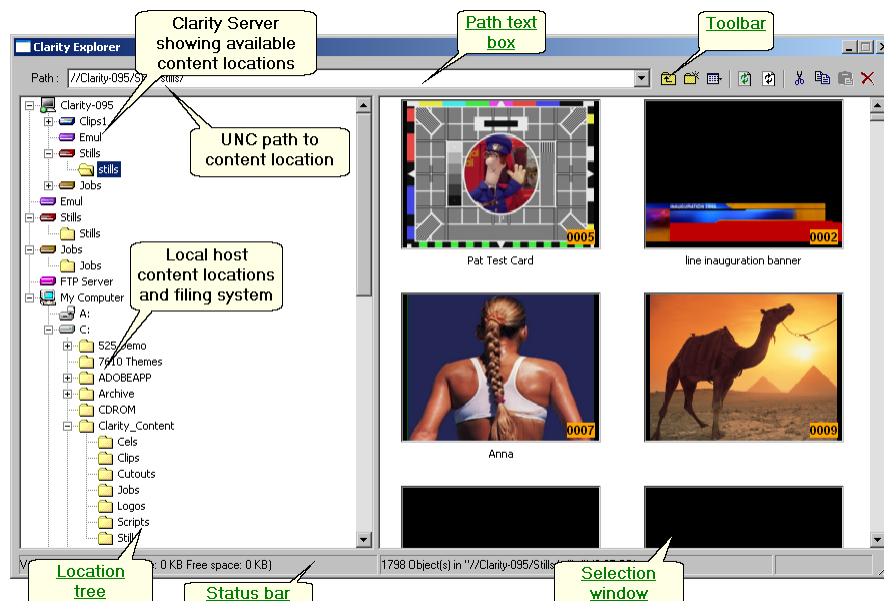
6.10.7.1.1 Location tree

The Location tree works in the same way as that used in the Windows Explorer. It displays all content available to the current system. This includes:

- physical clip drive volume(s) (if installed on both the local system or another Clarity Server);
- emulated clip store(s) (if configured on both the local system or another Clarity Server);
- any still store locations (if configured on both the local system or another Clarity Server);
- any remote FTP locations (if configured on the local system);
- all drives available via My Computer on the host system;
- all other Clarity Servers known to the host.

Once a location has been selected, its contents are shown in the Selection window [364]. If a Clarity Server is listed but not connected [365], you can connect to the server by selecting it in the location tree, then right-clicking and selecting Connect to Server from the shortcut menu that appears.

6.10.7.1.2 Path text box

The Path text box displays the path (either local or UNC) relating to the folder, location or group selected using the Location tree [364].

6.10.7.1.3 Selection window

The Selection window displays the contents of the folder, location or group selected using the Location tree [364].

6.10.7.1.4 Status bar

At the bottom of the Clarity Explorer is the Status bar that is split into two parts. Information about the selected physical clip store including volume name and total/free space in GB is always shown in the left-hand area; information about the selected folder or location including the number of objects contained in the folder and the resultant total size in GB is always shown in the right-hand area. This information applies to all drives (not just clip stores).

6.10.7.1.5   Toolbar

The toolbar enables standard Microsoft Windows filing operations to be performed.

Tool	Function	Tool	Function
	Move up to previous folder.		Refresh or rescan current browsed location.
	Create new folder within current location.		Copy currently selected file(s) or folder(s).
	Displays a shortcut menu enabling the selection of a different view for files.		Paste copied file(s) or folder(s).
	Cut currently selected file(s) or folder(s).		Delete currently selected file(s) or folder(s).

6.10.7.2   Available locations, colour coding of locations and location status

The diagrams below show examples of how locations, available on the local host and those made available via a known Clarity Server, are displayed within the Location tree 364.
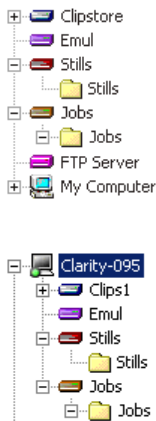
The following on the local host can be listed at the root of the local host if present or configured correctly:

- physical clips stores;
- configured emulated clip store;
- configured still store folder(s);
- configured job paths;
- configured FTP servers;
- My Computer

The following can be listed on Clarity Servers other than the local host below the selected Clarity Server, if present or configured correctly:

- physical clips stores;
- configured emulated clip store,
- configured still store folder(s),
- configured job paths;

The table below lists the available locations, location status and identifying icons that are viewable within the Location tree 364:

Icon	Colour	Name		Sub-Status Icon	Colour	Description
	Purple	Emul	Emulated Clip 368 Store 368	N/A	N/A	Emulated clip store if configured using the Clip Store Emulation dialog tab 710 on the Local Preferences dialog box 696. To view an emulated clip store on a Clarity Server other than the local host, the path to the clip store must have been made accessible to the host Clarity Server by interpretation of a valid drive map configured using the Drive Maps dialog sub-tab 656 on the Clarity Servers dialog tab 655 on the Global Preferences dialog box 654. Check availability of a Clarity Servers' local emulated clip store using the Clip Availability group box 660 on the Server Properties dialog tab 659 on the Global Preferences dialog box 654.

Icon	Colour	Name		Sub-Status Icon	Colour	Description
	Red	`Stills`	Still Store [374]	N/A	N/A	Still store folder(s) that have been configured using the Still Store dialog tab [730] on the Local Preferences dialog box [696]. To view still store folders on a Clarity Servers other than the local host, the paths must have been made accessible to the host Clarity Server by interpretation of a valid drive map configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654]. Check availability of a Clarity Servers' local still store folders using the Available Still Directories group box [660] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654].
	Pink	`<name>`	FTP Server [372]	N/A	N/A	FTP server that has been configured using the FTP dialog tab [713] on the Local Preferences dialog box [696]. FTP servers configured on Clarity Servers other than the local host cannot be viewed. `<name>` is configured using the Display Name text box on the FTP Connection Details dialog box [646].
	N/A		My Computer [373]	N/A	N/A	Enables browsing of the filing system on the local host. Also enables access to any networked drives (see below).
	N/A		Network Drive	N/A	N/A	Standard Windows network drives mapped using Microsoft Windows and available under My Computer. Can be used access content from the local host that is otherwise unavailable other Clarity Servers.
	Blue	`<name>`	Physical Clip [368] Store [368]	N/A	N/A	Connected physical clip store. `<name>` is configured using the Clip Store dialog tab [708] on the Local Preferences dialog box [696] on the host system. Check availability of a Clarity Servers' local physical clip store using the Clip Availability group box [660] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654]
	Orange	`<name>`	Job Path	N/A	N/A	Job path and any sub-folders contained below the paths that have been named and configured using the controls in the Job Path Configuration group box [661] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654]. To view a job path on a Clarity Server other than the local host, the path must have been made accessible to the host Clarity Server by the interpretation of one or more a valid drive maps configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654].

Icon	Colour	Name		Sub-Status Icon	Colour	Description
	Grey	`<name>`	Clarity Server	See below	N/A	Clarity Server known to the local host and configured using the Clarity Servers dialog tab `655` on the Global Preferences dialog box `654`. Connection functionality is configured using the Server Connect Mode group box `663`.
					Blue	Not connected to the selected Clarity Server. If a Clarity Server is listed but not connected `365`, you can connect to the server by selecting it in the location tree `367`, then right-clicking and selecting Connect to Server from the shortcut menu that appears.
					Green	Currently connected to the selected Clarity Server.
					Orange	Currently attempting to connect to the selected Clarity Server.
					Red	Failed to connect to the selected Clarity Server. This may be due to the Clarity Server not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

6.10.7.3   Shortcut menus

There are two shortcut menus available when using the Clarity Explorer. One can be accessed from the Location tree `364`, the other from the Selection window `364`. These provide access to functions in addition to those made available by the Toolbar `365`.

6.10.7.3.1   Location tree shortcut menu

If you right-click in the left-hand pane, the following menu is displayed. This menu is not displayed when a Clarity Server is selected.

Command	Function
Copy	Copy selected file(s) or folder(s).
Paste	Paste copied file(s) or folder(s) to selected location.
Rename	Rename currently selected folder.
Delete	Delete currently selected folder.
New Folder	Create new folder within current location.
Properties	View properties for currently selected location, drive or folder. If a clip volume is selected, the Volume Properties dialog box `778` is displayed.

If you right-click on a Clarity Server, the following shortcut menu is displayed:

Command	Function
Connect To Server	Connect to selected Clarity Server. If the selected Clarity Server is already connected, then the Disconnect From Server command will be displayed.

6.10.7.3.2   Selection window shortcut menu

If you right-click in the right-hand pane, the following menu is displayed.

Command	Sub-Menu Command	Function
Preview		Preview audio or video clip (internal or external clip storage only).
Paste		Paste copied selected file(s) or folder(s).
Cut		Displays a shortcut menu enabling the selection of a different view for files.
Copy		Copy currently selected file(s) or folder(s).
Rename		Rename currently selected file or folder.
Renumber		Renumber currently select still in Still Store.
Delete		Delete currently selected file(s) or folder(s).
New Folder		Create new folder within current location.
Record Clip		Record new audio or video clip in selected location (internal or external clip storage only). Displays the Get/Put Clip dialog box ⌐646¬ and the additionally the VTR Control Dialog control box ⌐359¬ in some circumstances.
Put Clip to Tape		Record selected audio or video clip to connected VTR.
Process Clip	Merge With Key	Merge selected video clip with key. Displays the Merge Video With Key dialog box ⌐736¬.
	Convert To Shaped Video	Convert selected video clip to a shaped video clips. Displays the Convert to Shaped Video dialog box ⌐603¬.
Properties		View properties for currently selected file or folder.

6.10.7.4   Working with clip stores

The Clarity Explorers' primary use is to enable the browsing, opening and saving of video and audio clips on:

- an internal clip storage volume and/or a connected external clip storage volume on the local host;
- an emulated clip store on the local host.

Available in the following different scenarios:

Browsing clips on local host physical clip and emulated clip stores ⌐368¬
Opening clips from local physical clip and emulated clip stores ⌐369¬
Saving clips to local physical clip and emulated clip stores ⌐370¬

The Clarity Explorer can also be used to browse video and audio clips on:

- an internal clip storage volume and/or a connected external clip storage volume on a known Clarity Server;
- an emulated clip store on a known Clarity Server.

Browsing clips on Clarity Server physical clip and emulated clip stores ⌐370¬

NOTE

- See Available locations, colour coding of locations and location status ⌐365¬ for more information on how clip stores are shown.
- Descriptions of the different information that can be shown for clips is available in the Clip information ⌐371¬ section.

6.10.7.4.1   Browsing clips on local host physical clip and emulated clip stores

Displayed on occasions where ONLY the browsing of clips is required on local host physical clip and emulated clip stores. Local emulated clip stores are configured using the Clip Store Emulation dialog tab ⌐729¬ on the Local Preferences dialog box ⌐696¬.

If your system is a PC running Clarity PREP software, then only an emulated clip store will be shown (Emul) (if

correctly configured on the local host). If your system is a full Clarity system featuring an internal clip storage volume and/or a connected external clip storage volume AND a configured emulated clip store, then potentially all of these locations will be shown.

In both cases, use the Location tree |364⟩ or Path text box |364⟩ to select an available clip store volume or navigate to different folders on the currently selected clip store.

6.10.7.4.2 Opening clips from local physical clip and emulated clip stores

Displayed on occasions where the selection of video or audio clips is required on local host physical clip and emulated clip stores. Local emulated clip stores are configured using the Clip Store Emulation dialog tab |729⟩ on the Local Preferences dialog box |696⟩.

If your system is a PC running Clarity PREP software, then only an emulated clip store will be shown (`Emul`) (if correctly configured on the local host). If your system is a full Clarity system featuring an internal clip storage volume and/or a connected external clip storage volume AND a configured emulated clip store, then potentially all of these locations will be shown.
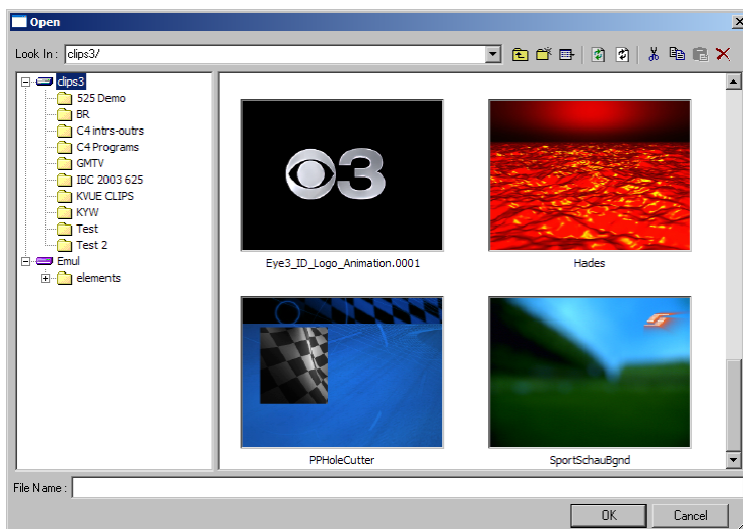
In both cases, use the Location tree |364⟩ to select an available clip store volume or navigate to different folders on the currently selected clip store. Alternatively, edit the path in the Look In text box and/or edit the path and filename in the File Name text box. Select OK to return to the previous dialog or control box.

SEE ALSO

Background dialog tab |756⟩
Audio dialog tab |752⟩

369   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Video Clip radio button 759
Graphics> 395 Cels / Video>Paste Clip 405
Cel and Clip toolbox 303
Inserting a live video object into a page foreground 497

6.10.7.4.3 Saving clips to local physical clip and emulated clip stores

Displayed on occasions where the saving of video or audio clips is required on local host physical clip and emulated clip stores. Local emulated clip stores are configured using the Clip Store Emulation dialog tab 729 on the Local Preferences dialog box 696.

If your system is a PC running Clarity PREP software, then only an emulated clip store will be shown (Emul) (if correctly configured on the local host). If your system is a full Clarity system featuring an internal clip storage volume and/or a connected external clip storage volume AND a configured emulated clip store, then potentially all of these locations will be shown.

In both cases, use the Location tree 364 to select another clip store volume or navigate to different folders on the currently selected clip store. Alternatively, edit the path in the Save In text box and/or edit the path and filename in the File Name text box. Select OK to return to the previous dialog or control box.

SEE ALSO

Playout File Output control box 347
Graphics> 395 Cels / Video>Create Video Clip 404
Cel and Clip toolbox 303
Cel and Clip control set 303
Clip Creation (Creation) control box 275

6.10.7.4.4 Browsing clips on Clarity Server physical clip and emulated clip stores

Displayed on occasions where ONLY the browsing of clips is required on physical clip and emulated clip stores available on known Clarity Servers. Local emulated clip stores are configured using the Clip Store Emulation dialog tab 729 on the Local Preferences dialog box 696.

If the Clarity Server is a PC running Clarity PREP software, then only an emulated clip store will be shown (Emul) (if correctly configured on the host Clarity Server and its location interpreted correctly by the local host). If the server is a full Clarity system featuring an internal clip storage volume and/or a connected external clip storage volume AND a configured emulated clip store, then potentially all of these locations will be shown.
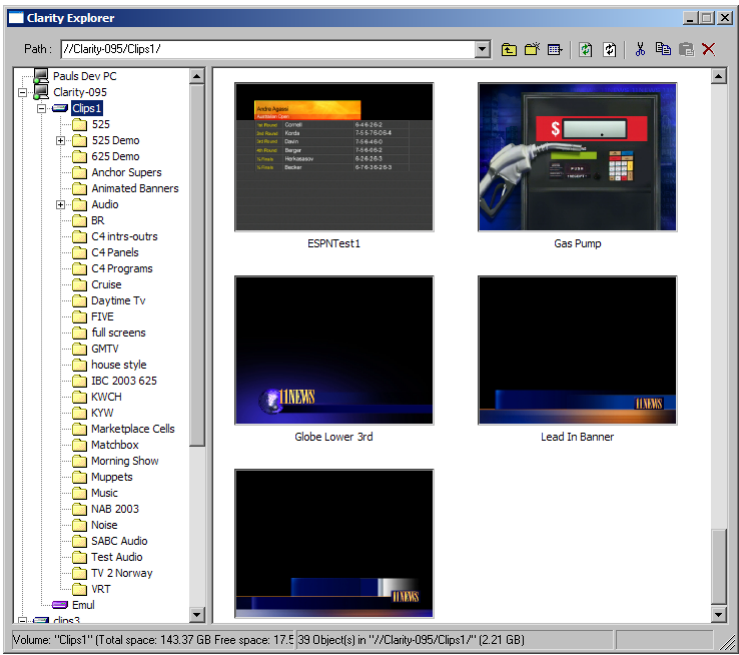
Use the Location tree 364 or Path text box 364 to select an available clip store volume or navigate to different folders on the currently selected clip store.

NOTE

- Check availability of a Clarity Servers' local emulated clip store and physical clip store(s) using the Clip Availability group box 660 on the Server Properties dialog tab 659 on the Global Preferences dialog box 654.
- To view an emulated clip store on a Clarity Server other than the local host, the path to the clip store must have been made accessible to the host Clarity Server by interpretation of a valid drive map configured using the Drive Maps dialog sub-tab 656 on the Clarity Servers dialog tab 655 on the Global Preferences dialog box 654.

6.10.7.4.5   Clip information

When viewing clips in the Clarity Explorer, the follow information fields are shown at the top of the Selection window 364 when the view mode is set to Details or Thumbs Details (using the View button in the toolbar 365).

Entry	Description	Variables
Name	Name of clip	`<NAME>`
Size	Physical size in MB	`<Size> MB`
Timecode	Timecode stamp	`HH:MM:SS:FF`
Length	Length of the clip in time and frames	`HH:MM:SS:FF (# of frames)`
Type	Type of clip	`Video Clip; Audio Clip; Video Clip (Preview Frame Only)`
Format	Format in which the clip was recorded in	
	Audio	`Stereo; Mono;`
	Video	`625 (PAL); 525 (NTSC)`
Sampling	Sampling rate of the clip	
	Audio (bits)	`16; 24`
	Video	`4224; 4444`
Modified	When the clip was last modified	`dd/mm/yy; hh/mm/ss`

Entry	Description	Variables
Attributes	Clip attributes	`To be documented`

6.10.7.5 Working with FTP servers

A secondary use of the Clarity Explorer is to provide access to FTP servers on the local host. FTP Servers configured on Clarity Servers other than the local host CANNOT be viewed.
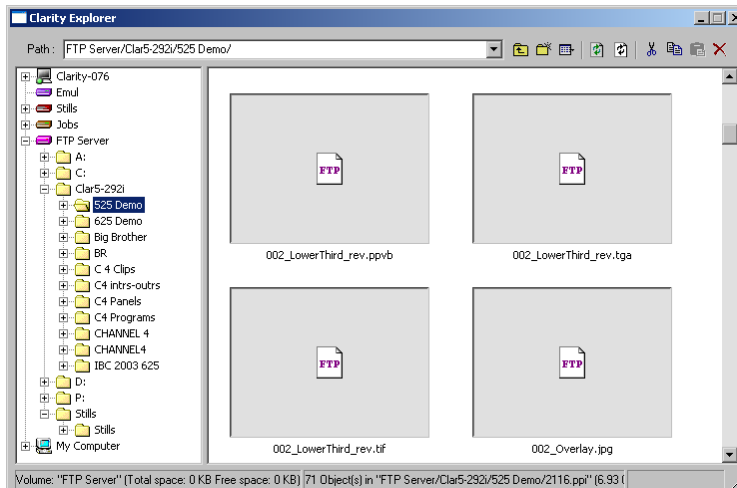
The FTP locations are configured using the FTP dialog tab [713] on the Local Preferences dialog box [696]. To display the User Preferences dialog box, select Options> [429] Local Preferences [430].

The FTP dialog tab enables the addition, configuration and deletion of remote FTP servers that will appear in the Clarity Explorer and that will be connected to using the File Transfer Protocol (FTP). Each remote server added must have a valid FTP server operating on it. As an example, FTP servers can be other Clarity system units, Collage 2/Graphite 2 system units or PC media servers. The FTP dialog tab also enables the current Clarity system to act as an FTP server [713].

NOTE

See Available locations, colour coding of locations and location status [365] for more information on how FTP servers are shown.

6.10.7.6 Working with job path locations

A secondary use of the Clarity Explorer is to provide access via defined job paths to jobs stored on both the local system hard disk and known Clarity Servers (if correctly configured on the host Clarity Server and its location interpreted correctly by the local host). Job paths define where job content is stored on a Clarity Server. Each job path that is defined requires an associated drive map which enables the job path to be located from any Clarity Server. Different parts of the CG Tools software such as the Clarity Explorer [362] and the Copy Clarity Job dialog box [605] use job paths and their associated drive mappings to locate job content from any location correctly, without having to supply path information at the time of use.

Job paths are named and configured using the controls in the Job Path Configuration group box [661] on the Server Properties dialog tab [659] on the Global Preferences dialog box [654].
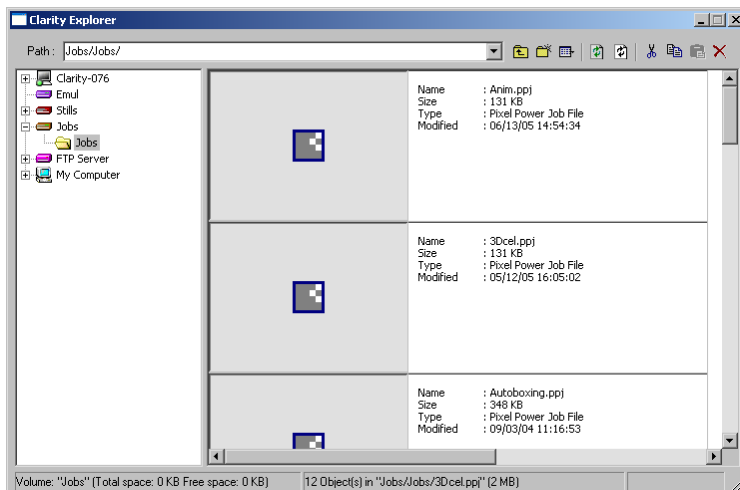
Use the Location tree [364] or Path text box [364] to select an available job path location and then navigate to different folders within the currently selected job path.

NOTE

- See Available locations, colour coding of locations and location status [365] for more information on how job paths are shown.
- To view a job path on a Clarity Server other than the local host, the path must have been made accessible to the host Clarity Server by the interpretation of one or more a valid drive maps configured using the Drive Maps dialog sub-tab [656] on the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654].

6.10.7.7   Working with My Computer and configured network drives

A secondary use of the Clarity Explorer is to provide access to folders stored on the local hard disk and any standard Microsoft Windows networked locations or mapped drives.
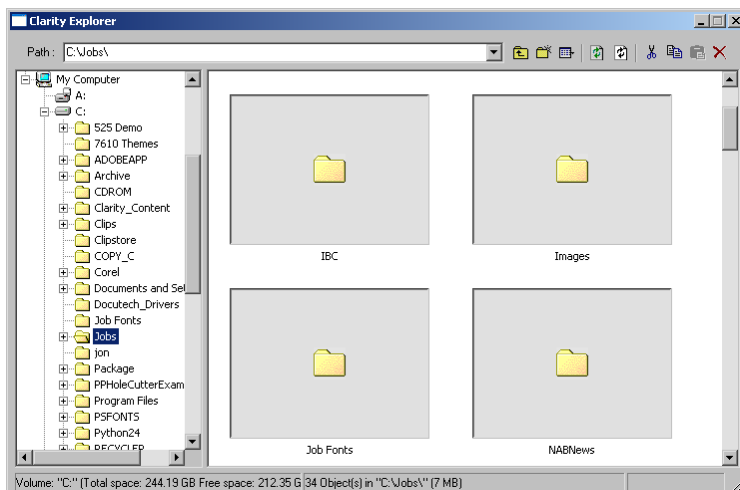
6.10.7.8 Working with still store locations

A secondary use of the Clarity Explorer is to provide access to stills stored on both the local system hard disk and known Clarity Servers (if correctly configured on the host Clarity Server and its location interpreted correctly by the local host). Local still store locations are configured using the Still Store dialog tab ⌐729⌐ on the Local Preferences dialog box ⌐696⌐.
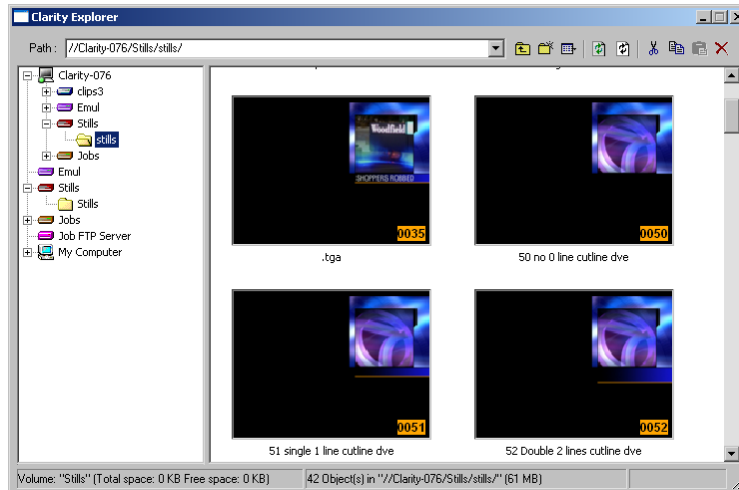
Use the Location tree ⌐364⌐ or Path text box ⌐364⌐ to select an available still store or navigate to different folders on the currently selected still store.

NOTE

- See Available locations, colour coding of locations and location status ⌐365⌐ for more information on how still stores are shown.
- Check availability of a Clarity Servers' local still store folders using the Available Still Directories group box ⌐660⌐ on the Server Properties dialog tab ⌐659⌐ on the Global Preferences dialog box ⌐654⌐.
- To view still store folders on a Clarity Servers other than the local host, the paths must have been made accessible to the host Clarity Server by interpretation of a valid drive map configured using the Drive Maps dialog sub-tab ⌐656⌐ on the Clarity Servers dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐.

6.10.8 Configuring the work area

The work area can be configured in a number of ways to suit your preferences.

- toolbars can be hidden or displayed ⌐374⌐;
- the Status bar can be hidden or displayed ⌐374⌐;
- toolbars can be floated or docked ⌐375⌐;
- control boxes can be hidden or displayed. ⌐375⌐

6.10.8.1 Displaying and hiding the Status bar and toolbars

The Status bar ⌐249⌐ displays details of what tools, controls, and menu commands do as you move the mouse cursor over them. The toolbars provide quick and easy access to some of the most commonly used functions. There are currently two toolbars available for display: the Standard toolbar ⌐247⌐ and the Job/Page toolbar ⌐248⌐.

The display of the Status bar and toolbars can be toggled in number of ways using the View ⌐421⌐ menu:

- to toggle the display of the Status bar, select View> ⌐421⌐Toolbars>Status Bar ⌐426⌐;
- to toggle the display of the Standard toolbar, select View> ⌐421⌐Toolbars>Standard toolbar ⌐426⌐;
- to toggle the display of the Job/Page toolbar, select View> ⌐421⌐Toolbars>Job/Page toolbar ⌐426⌐;
- to display all toolbars, select View> ⌐421⌐Toolbars>Show All ⌐427⌐;
- to hide all toolbars, select View> ⌐421⌐Toolbars>Hide All ⌐427⌐;

If the Status bar or a toolbar is currently displayed in the work area, this is indicated by a tick next to the name in the

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   374

Copyright © 2000-2006 Pixel Power Ltd.

View 421 menu.

Toolbars can also be displayed or hidden using a shortcut menu:

- right-click on a toolbar title bar and select Hide from the shortcut menu to hide that toolbar.
- right-click on a toolbar to display the Toolbars shortcut menu and then select a toolbar to display or hide.

6.10.8.2   Docking and floating toolbars

Depending on your own preferences, toolbars can be floated or docked in the normal Microsoft Windows manner. For more information, refer to the Microsoft Windows 2000 Getting Started Guide.

6.10.8.3   Displaying and hiding control boxes

Control boxes 326 provide access to grouped software functionality. They are similar to dialog boxes, but they remain in view at all times whilst working within the work area. The display of control boxes can be toggled by selecting View>Toolbars 421 and then select a control box to display or hide. If a control box is currently displayed in the work area, this is indicated by a tick next to the control name in the View 421 menu.

6.11   Exiting the CG Tools software

To exit the software product that you are running, do any of the following:

- select File> 378 Exit 384 ;
- from the Windows Control menu, select Close;
- select the Close button in the top right-hand corner of the main application window 246 ;
- double-click on the Control-menu icon.

If the current job is unsaved or contains any pictures with unsaved changes, a message appears giving you the option to save the job or unsaved pictures before exiting. For each user with a different login and password, the layout of the desktop is saved until they next run the selected software product, i.e. the position of the toolbars and controls are remembered. When a CG Tools software derivative shuts down there is quite a delay while this happens. A message appears informing the user that the application is currently shutting down until the Clarity.exe thread has stopped functioning within Windows.
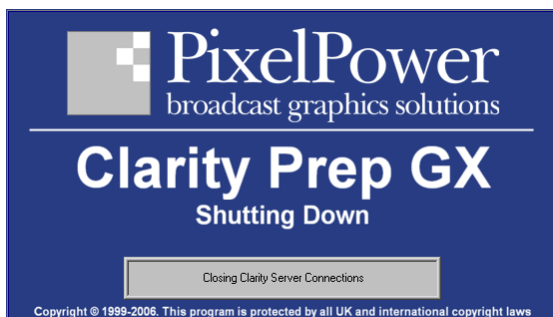
Section 7

Menus
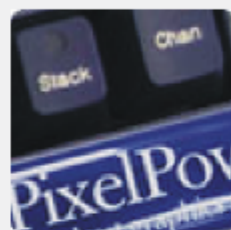
7. Menus

The following menus are available in the CG Tools software. New or edited menus since the last release are highlighted with dark grey shading. Menus that feature an extension to their name in brackets are menus that are used in different contexts, but are named the same e.g. the contents of the Edit menu changes depending on whether a job or page stack is selected.

Name	Purpose	Availability		
		Job Edit	Page Edit	Stack Edit
File ⌐378¬	General job and system operations including open and save as well as job copying, page export, reset and software exit.	■	■	■
Edit (Job) ⌐384¬	Editing for jobs including undo and redo, MS Windows standard cut, copy and paste actions as well a spell checking and customised paste functions.	■	■	■
Edit (Page Stack) ⌐388¬	Editing for page stacks including page stack creation, editing and MS Windows standard cut, copy and paste actions.			■
Page ⌐390¬	All fundamental page creation and editing including graphic layer selection, naming and page navigation.	■		
Graphics ⌐395¬	All fundamental page graphic (shapes, clock, cel etc.) creation and editing including graphic edit mode selection.		■	
Text ⌐408¬	All fundamental text and marker control and also subtitle and ASCII import.		■	
Background ⌐419¬	Page background operations including saving, display and edit and grabbing video. Also controls access to painting functions.		■	
View (Job) ⌐421¬	Control the display of GUI components and zooming within the Graphic Edit window ⌐260¬.	■	■	
View (Page Stack) ⌐427¬	Control the display of the current page stack.			■
Options ⌐429¬	Edit user preferences, local preferences, global preferences, job preferences, Graphic Edit window ⌐260¬ settings and also language and other miscellaneous options.	■	■	■
Window ⌐433¬	Control the display of windows within the CG Tools software.	■	■	■
Help ⌐434¬	Access online help and context sensitive help. Also access version information about the CG Tools software.	■	■	■
Licence ⌐435¬	Licence properties and licence code entry.	■	■	■

7.1 File

Back to Menus home ⌐378¬.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
New Job ⌐379¬		Left CTRL + N	🗋	■	■	
Open Job ⌐380¬		Left CTRL + O	📂	■	■	
Save Job ⌐380¬		Left CTRL + S	💾	■	■	
Save Job As ⌐380¬		Left CTRL + S	💾	■	■	

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
New Stack [380]				■	■	Must have stack open and selected for shortcut to work
Open Stack [380]		Left CTRL + O		■	■	
Save Stack [380]		Left CTRL + S		■	■	
Save Stack As [381]		Left CTRL + S		■	■	
Save All [381]		Left CTRL + S		■	■	
Close [381]				■	■	
Close and Save [381]				■	■	Clarity Plugin only
Close and Discard [381]				■	■	Clarity Plugin only
Unpack Job From ZIP [381]				■	■	
Copy Clarity Job [381]				■	■	
Convert Cel [381]				■	■	
Clarity Explorer [382]				■	■	
Import	Import Image Stack [382]			■	■	
	MXF Import [382]			■	■	
Export	Export Pages [382]			■		
	Export Page [382]				■	Must have page open for editing in Graphic Edit window [260]
	MXF Export [383]			■	■	
Job Maintenance [383]				■		
Job Properties [383]				■	■	
[Recent Files] [383]				■	■	Not displayed in first instance of using the software
Quickloads	User Quickloads [383]			■	■	
	Local Quickloads [383]			■	■	
Reset	Job [384]			■	■	
	Stack [384]			■	■	
	Keyboard [384]			■	■	
Log off <Username> [384]				■	■	
Exit [384]				■	■	

7.1.1   New Job

Create new job and close job currently open.

	Left CTRL + N

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

7.1.2 Open Job

Open existing job from disk.

Displays the <u>Open Job dialog box</u> |750⟩.

📂	Left CTRL + O

<u>Font/Browse RapidAction key + SHIFT</u> |186⟩

7.1.3 Save Job

Save job with current name if already named. If the job has not been saved, performs the same as <u>File></u> |378⟩<u>Save Job As</u> |380⟩ and displays the <u>Save Job As dialog box</u> |781⟩.

💾	Left CTRL + S

<u>Save Current Job/Reset RapidAction key</u> |187⟩

7.1.4 Save Job As

Save job with new name if already named.

Displays the <u>Save Job As dialog box</u> |781⟩.

💾	Left CTRL + S (only if job is has been not been named)

<u>Save Current Job/Reset RapidAction key</u> |187⟩ (only if job is has been not been named)

7.1.5 New Stack

Create new page stack and close page stack currently open.

7.1.6 Open Stack

Open existing page stack.

Displays the <u>Open Stack dialog box</u> |750⟩.

📂	Left CTRL + O

7.1.7 Save Stack

Save page stack with current name if already named. If the page stack has not been saved, performs the same as <u>File></u> |378⟩<u>Save Stack As</u> |381⟩ and displays the <u>Save Stack As dialog box</u> |784⟩.

💾	Left CTRL + S

<u>Save Current Job/Reset RapidAction key</u> |187⟩

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   380

Copyright © 2000-2006 Pixel Power Ltd.

7.1.8   Save Stack As

Save page stack with new name if already named.

Displays the Save Stack As dialog box 784.

> 🖫   Left CTRL + S (only if stack is has been not been named)

Save Current Job/Reset RapidAction key 187 (only if stack is has been not been named)

7.1.9   Save All

Save all with current name(s) if already named. If the job and/or page stack has not been saved, performs the same as File> 378 Save As 380 and displays either the Save Job As dialog box 781 or the Save Stack As dialog box 784.

> 🖫   Left CTRL + S

Save Current Job/Reset RapidAction key 187

7.1.10   Close

Close current job.

7.1.11   Close and Save [CLARITY PLUGIN]

Clarity Plugin only

Close current page and save edits.

7.1.12   Close and Discard [CLARITY PLUGIN]

Clarity Plugin only

Close current page and discard edits.

7.1.13   Unpack Job From ZIP

Unpack Clarity job from a zipped job package created using the Package dialog tab 614 on the Copy Clarity Job dialog box 605.

Displays the Unpack Job From Zip Archive dialog box 808.

7.1.14   Copy Clarity Job

Copy Clarity job (.PPJ) and additionally associated files to another location.

Displays the Copy Clarity Job dialog box 605.

7.1.15   Convert Cel

Convert cel saved in earlier format (.PPC) to new format (.CEL).

Displays the Cel Conversion Tool dialog box 593.

7.1.16 Clarity Explorer

Display the Clarity Explorer where media assets can be managed.

Displays the Clarity Explorer 362.

🔍	Left CTRL + O

7.1.17 Import

7.1.17.1 Import Image Stack

Import image range to create stack of pages within Page Browser, using the images as the page backgrounds.

Displays the Open Background Picture dialog box 748.

📄	

7.1.17.2 MXF Import

Import industry standard .MXF files.

If you have NOT purchased and installed the MXF Plugin [LICENSED] 26 option, then the basic version of the MXF Import dialog box 743 is displayed. If you HAVE purchased and installed the MXF Plugin [LICENSED] 26 option, the Open dialog box 748 is displayed. Select the desired .MXF file and then select OK. The advanced version of the MXF Import dialog box 743 is then displayed.

SEE ALSO

MXF files 526
MXF Import dialog box 743

7.1.18 Export

7.1.18.1 Export Pages

Export selected pages in Page Browser to file.

Displays the Export Pages dialog box 635.

📤	

7.1.18.2 Export Page

Must have page open for editing in Graphic Edit window 260.

Export current page open in Graphic Edit window to a file.

Displays the Export Page to File dialog box 633.

📤	

7.1.18.3 MXF Export

MXF export functionality is only available if you have purchased and installed the MXF Plugin [LICENSED] 26 **option.**

Export industry standard .MXF files.

Displays the MXF Export dialog box 741.

SEE ALSO

MXF files 526
MXF Export dialog box 741

7.1.19 Job Maintenance

Conduct maintenance on the current job.

Displays the Job Maintenance dialog box 686.

7.1.20 Job Properties

View the properties of the current job.

Displays the Job Properties dialog box 694.

7.1.21 [Recent Files]

Displays recently opened jobs (.PPJ) or page stacks (.PPS).

7.1.22 QuickLoads

7.1.22.1 User QuickLoads

Displays up to ten user defined QuickLoads that have been set as active using the controls on the User QuickLoads dialog tab 821 on the User Preferences dialog box 809.

SEE ALSO

QuickLoads 175

7.1.22.2 Local QuickLoads

Displays up to ten user defined QuickLoads that have been set as active using the controls on the Local QuickLoads dialog tab 722 on the Local Preferences dialog box 696.

SEE ALSO

QuickLoads 175

7.1.23   Reset

7.1.23.1   Job

Reset current job i.e clear current job without saving and open new job.

Save Current Job/Reset RapidAction key + SHIFT [187]

7.1.23.2   Stack

Reset current job i.e clear current page stack without saving and open new page stack.

7.1.23.3   Keyboard

Reset the connected keyboard.

SEE ALSO

Resetting a keyboard [208]

7.1.24   Log off <Username>

Log out of the CG Tools session as the current user.

7.1.25   Exit

Close application.

7.2   Edit(Job)

Back to Menus home [378].

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands and is available when editing a job or page within a job:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Undo [385]		Left CTRL + Z			■	Must have undo functionality turned on. See Edit dialog tab [810] on User Preferences dialog box [809].
Redo [385]		Left CTRL + Y			■	Must have undo functionality turned on. See Edit dialog tab [810] on User Preferences dialog box [809].
Cut [385]		Left CTRL + X		■	■	
Copy [386]		Left CTRL + C		■	■	

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Paste 386		Left CTRL + V	▣	■	■	
Delete 386		Left ALT + DELETE		■	■	Elements or pages are lost indefinitely; they cannot be pasted back.
Remove 386		Left CTRL + Left SHIFT + DELETE		■	■	Must have more than one page in job before command becomes available.
Copy From 386		Left CTRL + H			■	
Clear All 386					■	
Replace Foreground 386		Left CTRL + F		■	■	
Replace Background 387		Left CTRL + B		■	■	
Copy Style 387		Left CTRL + Q			■	
Paste Style 387		Left CTRL + W			■	
Renumber Pages 387				■	■	
Spell Check	Spell Check Entire Job 387			■	■	
	Spell Check Page 387			■	■	
	Spell Check Element 387				■	

7.2.1   Undo

Undo previous action within the Graphic Edit window 260.

↩	Left CTRL + Z

7.2.2   Redo

Redo previous action within the Graphic Edit window 260.

↪	Left CTRL + Y

7.2.3   Cut

Cut graphic element(s) currently selected in Graphic Edit window 260 or page(s) selected in Page Browser 251 /Page List 252 to the Windows Clipboard.

✂	Left CTRL + X

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

7.2.4 Copy

Copy graphic element(s) currently selected in Graphic Edit window [260] or page(s) selected in Page Browser [251]/Page List [252] to the Windows Clipboard.

🗐	Left CTRL + C

7.2.5 Paste

From the Windows Clipboard, paste graphic element(s) into the page currently open in the Graphic Edit window [260] or paste page(s) into the Page Browser [251]/Page List [252]. If you are pasting pages, the way in which pages will be pasted is defined using the settings in the Default Page Paste Mode group box [811] on the Edit dialog tab [810] on the User Preferences dialog box [809]. Optionally, the Select Page Paste Mode dialog box [798] may be displayed.

📋	Left CTRL + V

7.2.6 Delete

Delete page element(s) currently selected in Graphic Edit window [260] or page(s) selected in Page Browser [251]/Page List [252].

✖	Left ALT + DELETE

Erase Layer/Erase Page RapidAction key + SHIFT [188]

Erase Layer/Erase Page RapidAction key [188]

7.2.7 Remove

Remove selected page(s) from the Page Browser [251]/Page List [252] and renumber remaining pages automatically.

Left CTRL + Left SHIFT + DELETE

7.2.8 Copy From

Copy foreground graphic elements from a selected page.

Displays the Copy From dialog box [605].

Left CTRL + H

7.2.9 Clear All

Clear all foreground page graphic elements from the page currently open in the Graphic Edit window [260].

7.2.10 Replace Foreground

Replace foreground of page(s) selected in the Page Browser [251]/Page List [252] with the foreground of a page that has been copied using the Edit> [384] Copy [386] command.

Left CTRL + F

7.2.11   Replace Background

Replace background of page(s) selected in the Page Browser 251 /Page List 252 with the background of a page that has been copied using the Edit> 384 Copy 386 command.

Left CTRL + B

7.2.12   Copy Style

Copies text style attributes of selected text.

Left CTRL + Q

Style Pick RapidAction key 192

Style Pick/Safe Area RapidAction key 188

7.2.13   Paste Style

Paste text style attributes of text copied using Edit(Job)> 384 Copy Style 387 .

Left CTRL + W

Style Apply RapidAction key 192

Style Apply/Style Browse RapidAction key 188

7.2.14   Renumber Pages

Renumber pages in the Page Browser 251 /Page List 252 .

7.2.15   Spell Check

This menu enables access to the spell checking commands and the resulting Spell Check dialog box 802 .

For more information on spell checking, see Spelling 546 .

7.2.15.1   Spell Check Entire Job

Spell check entire job.

Displays the Spell Check dialog box 802 .

7.2.15.2   Spell Check Page

Spell check page currently open in Graphic Edit window 260 .

Displays the Spell Check dialog box 802 .

7.2.15.3   Spell Check Element

Spell check selected text element (page, line or spline) on page currently open in Graphic Edit window 260 .

Displays the Spell Check dialog box 802 .

7.3   Edit(Page Stack)

Back to Menus home 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands and is available when a page stack is selected:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability	Conditions
				Stack Edit	
Edit Entry 388		ENTER		■	
Insert Entry 388		INSERT		■	
Cut 388		Left CTRL + X	✂	■	
Copy 389		Left CTRL + C	📋	■	
Paste 389		Left CTRL + V	📋	■	
Delete 389		DELETE		■	
Goto Row 389		Left CTRL + G		■	
Insert Row 389		Left CTRL + CUE		■	
Delete Row 389		Left CTRL + CHAN		■	
Shift Col Up 389		Left CTRL + Left SHIFT + ENTER		■	
Shift Col Dn 390		Left CTRL+ ENTER		■	

7.3.1   Edit Entry

Edit page stack entry selected in the current stack.

The Insert/Edit Stack Entry dialog box 672 is displayed.

ENTER or double-click on populated page stack entry

7.3.2   Insert Entry

Insert page stack entry above selected entry in the current stack.

The Insert/Edit Stack Entry dialog box 672 is displayed.

INSERT or double-click on empty page stack entry

7.3.3   Cut

Cut currently selected page stack entry or entries from the current page stack to the Windows Clipboard.

✂   Left CTRL + X

7.3.4 Copy

Copy currently selected page stack entry or entries from the current page stack to the Windows Clipboard.

	Left CTRL + C

7.3.5 Paste

From Windows Clipboard, paste page stack entries into the current page stack, over selected entry and any subsequent entries.

	Left CTRL + V

7.3.6 Delete

Delete currently selected page stack entry or entries from the current page stack.

DELETE

7.3.7 Goto Row

Go to new row in current page stack.

The Goto Page dialog box 668 is displayed.

Left CTRL + G or use the UP, DOWN, LEFT, RIGHT arrow keys or PgUp and PgDn keys

7.3.8 Insert Row

Insert row above highlighted row in the current page stack.

Left CTRL + CUE

7.3.9 Delete Row

Delete selected row from the current page stack.

Left CTRL + CHAN

7.3.10 Shift Col Up

Move highlighted stack entry up one row in the current column, without affecting entries on the same row in adjacent columns.

Left CTRL + Left SHIFT + ENTER

7.3.11 Shift Col Dn
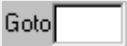
Move highlighted stack entry down one row in the current column, without affecting entries on the same row in adjacent columns.

Left CTRL + ENTER

7.4 Page

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Add New 391				■		
Insert New 391				■		
Previous 391				■		
Next 391				■		
Goto 391		Left CTRL + G	Goto	■	■	
Auto Set Name 391		Left CTRL + A		■		
Change Name 392				■		
Clear Name 392				■		
Edit Settings 392				■	■	
Change background 392				■	■	
Edit Graphics 392				■		
Edit Layer	Edit Foreground 392		F	■	■	
	Edit Background (Both Fields) 392		B	■	■	
	Edit Background (Field 1) 393		B1	■	■	
	Edit Background (Field 2) 393		B2	■	■	
Foreground Options	Read Only 393			■		
	Stick Foreground 393			■		
	Scroll Lock 394			■		
Revert 394		Left CTRL + R			■	
Update 394		Left CTRL + U			■	
Template 394					■	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   390

Copyright © 2000-2006 Pixel Power Ltd.

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Break Links to Global Fields 394				■	■	
Set Page Preview Frame 395				■		

7.4.1 Add New

Add a blank page to the end of the list of pages in the Page Browser 251/Page List 252.
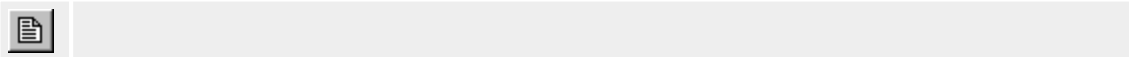
7.4.2 Insert New

Insert a blank page before an existing selected page in the Page Browser 251/Page List 252.
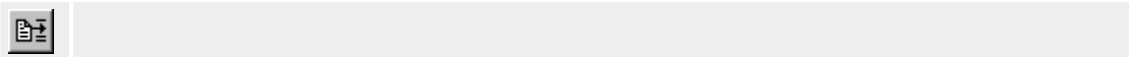
7.4.3 Previous

Move to the previous page in the Page Browser 251/Page List 252.
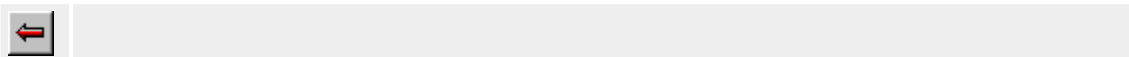
7.4.4 Next

Move to the next page in the Page Browser 251/Page List 252.
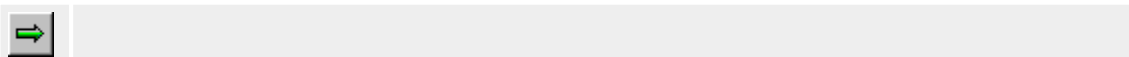
7.4.5 Goto

Goto to a specific page and open that page in the Graphic Edit window 260. The Goto Page dialog box 668 is displayed.

Goto	Left CTRL + G
Read Page RapidAction key 191 + Numeric keypad number	
Read RapidAction key 187 + Numeric keypad number	

7.4.6 Auto Set Name

Reverts user edited page names for the selected page(s) in the Page Browser 251/Page List 252 back to the default naming scheme i.e. Page 1, Page 2 etc.

Left CTRL + A

7.4.7 Change Name

Change the name for the page(s) currently selected in Page Browser [251]/Page List [252] to a user defined name.

Name Page RapidAction key [190]

7.4.8 Clear Name

Clear the name for the page(s) currently selected in Page Browser [251]/Page List [252].

7.4.9 Edit Settings

Edit settings for the selected page(s) in the Page Browser [251]/Page List [252]. The Page Settings dialog box [751] is displayed showing the dialog tab that was last selected.

7.4.10 Change Background

Change the background type for the selected page(s) in the Page Browser [251]/Page List [252]. The Page Settings dialog box [751] is displayed showing the Background dialog tab [756].

Black/Picture Bgnd RapidAction key [186]

7.4.11 Edit Graphics

Open the page currently selected in Page Browser [251]/Page List [252] in the Graphic Edit window [260] for editing.

7.4.12 Edit Layer

7.4.12.1 Edit Foreground

Move to the foreground layer of the page currently open in the Graphic Edit window [260]. Any existing foreground graphic elements will be restored over the current background.

F

7.4.12.2 Edit Background (Both Fields)

Move to the background layer of the page currently open in the Graphic Edit window [260] and displays both fields of the background image to enable subsequent drawing operations to affect both field 1 and 2.

Any foreground graphic elements will be temporarily removed from display. Whilst the background layer is selected, any drawing operation can be performed, but once a graphic element has been stuck down, it cannot be removed or edited.

After the background layer has been selected for editing, the Background control tab [270] appears on the Graphic Tools [266], enabling the configuration and editing of the matte or key channel of the background image defined on the current page.

B

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   392

Copyright © 2000-2006 Pixel Power Ltd.

7.4.12.3 Edit Background (Field 1)

Move to the background layer of the page currently open in the <u>Graphic Edit window</u> ⌐260⌐ and displays field 1 of the background image to enable subsequent drawing operations to affect ONLY field 1.

Any foreground graphic elements will be temporarily removed from display. Whilst the background layer is selected, any drawing operation can be performed, but once a graphic element has been stuck down, it cannot be removed or edited.

After the background layer has been selected for editing, the <u>Background control tab</u> ⌐270⌐ appears on the <u>Graphic Tools</u> ⌐266⌐, enabling the configuration and editing of the matte or key channel of the background image defined on the current page.

7.4.12.4 Edit Background (Field 2)

Move to the background layer of the page currently open in the <u>Graphic Edit window</u> ⌐260⌐ and displays field 2 of the background image to enable subsequent drawing operations to affect ONLY field 2.

Any foreground graphic elements will be temporarily removed from display. Whilst the background layer is selected, any drawing operation can be performed, but once a graphic element has been stuck down, it cannot be removed or edited.

After the background layer has been selected for editing, the <u>Background control tab</u> ⌐270⌐ appears on the <u>Graphic Tools</u> ⌐266⌐, enabling the configuration and editing of the matte or key channel of the background image defined on the current page.

7.4.13 Foreground Options

7.4.13.1 Read Only

Protect the foreground from editing for the selected page(s) in the <u>Page Browser</u> ⌐251⌐/<u>Page List</u> ⌐252⌐.

The foreground of a page can be protected. This makes all foreground objects read-only, and can be used to protect pages from being accidentally edited. This is especially useful for page templates. Read-only status for the selected pages(s) is indicated by the Read Only label in the Foreground column of the <u>Page List</u> ⌐252⌐.

NOTE

This setting is automatically applied when pages are configured as template page using <u>Page></u> ⌐390⌐<u>Template</u> ⌐394⌐.

7.4.13.2 Stick Foreground

For the selected page(s) in the <u>Page Browser</u> ⌐251⌐/<u>Page List</u> ⌐252⌐, configure foreground graphic elements to be collapsed into the background before the next page is taken.

After foreground animation has completed, you may want to collapse foreground page elements into the background before the next page (configured with a transparent background) is taken; thus enabling the background from the previous page to show through. This method enables the building up a single picture using several sequential pages contained within a job. Stick Foreground status for the selected pages(s) is indicated by the Stick label in the Foreground column of the <u>Page List</u> ⌐252⌐.

7.4.13.3 Scroll Lock

Lock foreground scrolling for the selected page(s) in the Page Browser [251]/Page List [252].

By default, the foreground will pan in any required direction as text is entered into a text page on the foreground of that page. When deleting a text page in the selected page foreground, you may want to lock foreground scrolling so that the foreground remains stationary as the text page extends beyond the visible area of the page. Scroll Lock foreground status for the selected pages(s) is indicated by the Scroll Lock label in the Foreground column of the Page List [252].

7.4.14 Revert

If Update/Revert mode is turned on, reverts the current page in the Graphic Edit window back to its previous saved state shown by the page preview in the Page Browser [251].

Left CTRL + R

Revert RapidAction key [191]

SEE ALSO

Update/Revert edit mode [547]
User Preferences dialog box/Edit dialog tab/Edit mode group box [812]

7.4.15 Update

If Update/Revert mode is turned on, saves edits to the current page in the Graphic Edit window and updates the page preview in the Page Browser [251].

Left CTRL + U

Update RapidAction key [192]

SEE ALSO

Update/Revert edit mode [547]
User Preferences dialog box/Edit dialog tab/Edit mode group box [812]

7.4.16 Template

Toggle the current page as a read-only template page upon which other pages can be based. Can also be configured using the Template column in the Page List [252]. The entry will be subsequently highlighted in bold. See Configuring how template pages are shown [259] for more information. The Page> [390] Foreground Options>Read Only [393] setting is also toggled.

NOTE

Under automation control, template pages are not updated.

7.4.17 Break Links to Global Fields

Break all links to global fields on the selected page(s) in the Page Browser [251]/Page List [252].

Useful in situations where you have page template fields that are linked global fields, which are also configured to accept data from a remote source e.g. Microsoft Excel spreadsheet. With the page template fields filled with data from the remote source, you can use this command to subsequently break links to the spreadsheet, whilst maintaining the existing data in the fields. You can then save the page and copy it to another page.

SEE ALSO

Field Settings (Field) control tab [283]
Field Data Connection Settings (Data) control tab [281]

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   394

Copyright © 2000-2006 Pixel Power Ltd.

7.4.18   Set Page Preview Frame

Define the preview page displayed when the page is cued online (the frame will not be used when creating the page thumbnails). When cueing pages, this functionality uses the software playout channel to render the correct preview frame and therefore the software playout channel must be available.

Displays the Set Playout Preview dialog box ⌐800⌐.

7.5   Graphics

Back to Menus home ⌐378⌐.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Select	All ⌐397⌐				■	
	First Graphic ⌐397⌐					
	Previous Graphic ⌐397⌐					
	Next Graphic ⌐397⌐					
	Last Graphic ⌐397⌐					
Graphic Mode	Size and Move ⌐398⌐				■	
	Point Shading ⌐398⌐				■	
	Line Shading ⌐398⌐				■	
	Texture Map Offset ⌐398⌐				■	
	Vertex ⌐399⌐				■	
	Text ⌐399⌐				■	
	Autobox Style ⌐399⌐				■	
Bring to Front ⌐399⌐					■	
Bring Forward ⌐399⌐					■	
Send Backward ⌐400⌐					■	
Send to Back ⌐400⌐					■	
Stop Editing ⌐400⌐		ESC			■	
Assign To Live Surface ⌐400⌐					■	
Animated Path ⌐400⌐					■	

395   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Shapes	Rectangle 400				■	
	Rounded Rect 401				■	
	Circle 401				■	
	Ellipse 401				■	
	Star 401				■	
	Regular Polygon 402				■	
	Line 402				■	
	Polygon 402				■	
	Spline 402				■	
	Arc 403				■	
	Cutout 403				■	
Clocks	Digital Clock 403				■	
	Date Clock 403				■	
Cels / Video	Create Cel Animation 404				■	
	Create Video Clip 404				■	
	Cel Animation 404				■	
	Paste Live 404				■	
	Paste Clip 405				■	
Rectangle Selector 405					■	
Formatting	Left 405				■	Must have graphic element selected.
	Right 405				■	"
	Top 406				■	"
	Bottom 406				■	"
	Centre Horizontal 406				■	"
	Centre Vertical 406				■	"
Fill Mode	Open 406				■	Must have spline selected.
	Closed 407				■	"
	Filled 407				■	"

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Spline	Cubic [407]				■	"
	Beta [407]				■	"
	Bezier [407]				■	"
Roller Adjust All [408]					■	Page must be formatted with Roll or Reverse Roll foreground animation [440].

7.5.1   Select

7.5.1.1   All

Select all graphic elements on current layer of the page currently open in the Graphic Edit window [260].

7.5.1.2   First Graphic

Select the first graphic element that was drawn on the current layer of the page currently open in the Graphic Edit window [260].
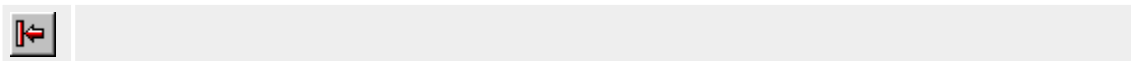
7.5.1.3   Previous Graphic

Select the previous graphic element drawn in relation to the selected element on the current layer of the page currently open in the Graphic Edit window [260].
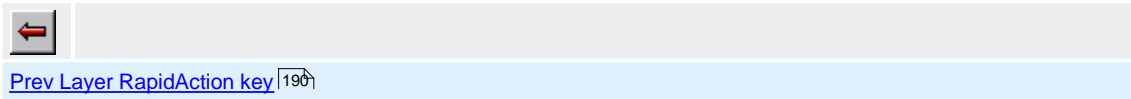
Prev Layer RapidAction key [190]

7.5.1.4   Next Graphic

Select the next graphic element drawn in relation to the selected element on the current layer of the page currently open in the Graphic Edit window [260].
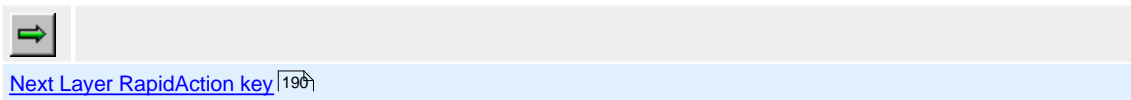
Next Layer RapidAction key [190]

7.5.1.5   Last Graphic

Select the last graphic element that was drawn on the current layer of the page currently open in the Graphic Edit window [260].
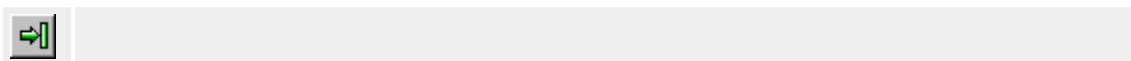
7.5.2   Graphic Mode

7.5.2.1   Size and Move

Selects the Size and Move graphic editing mode for the page currently open in the <u>Graphic Edit window</u> 260.

⊕

SEE ALSO

<u>Size and Move</u> 482
<u>Graphic planes</u> 498
<u>Shading types</u> 499

7.5.2.2   Point Shading

Selects the Point Shading graphic editing mode for the page currently open in the <u>Graphic Edit window</u> 260.

◎

SEE ALSO

<u>Point Shading</u> 481
<u>Graphic planes</u> 498
<u>Shading types</u> 499

7.5.2.3   Line Shading

Selects the Line Shading graphic editing mode for the page currently open in the <u>Graphic Edit window</u> 260.

▨

SEE ALSO

<u>Line Shading</u> 480
<u>Graphic planes</u> 498
<u>Shading types</u> 499

7.5.2.4   Texture Map Offset

Selects the Texture Map Offset graphic editing mode for the page currently open in the <u>Graphic Edit window</u> 260.

⊕

SEE ALSO

<u>Texture Map Offset</u> 483
<u>Graphic planes</u> 498
<u>Shading types</u> 499

7.5.2.5   Vertex

Must be working within a text spline to enable selection of this mode.

Selects the Texture Map Offset graphic editing mode for the page currently open in the Graphic Edit window 260.

SEE ALSO

Vertex 484
Graphic planes 498
Shading types 499

7.5.2.6   Text

Must be working within a text page, line or spline to enable selection of this mode.

Selects the Text graphic editing mode for the page currently open in the Graphic Edit window 260.

SEE ALSO

Text 483
Graphic planes 498
Shading types 499

7.5.2.7   Autobox Style

Must be working within a text page to enable selection of this mode.

Selects the Autobox Style graphic editing mode for the page currently open in the Graphic Edit window 260.

SEE ALSO

Autobox Style 479
Graphic planes 498
Shading types 499

7.5.3   Bring to Front

Bring selected graphic element to the front of the foreground page order for the page currently open in the Graphic Edit window 260.

7.5.4   Bring Foward

Bring selected graphic element forward one place in the foreground page order for the page currently open in the Graphic Edit window 260.

7.5.5   Send Backward

Send selected graphic element backward one place in the foreground page order for the page currently open in the Graphic Edit window 260.

7.5.6   Send to Back

Send selected graphic element to the back of the foreground page order for the page currently open in the Graphic Edit window 260.

7.5.7   Stop Editing

Complete the editing of the selected graphic element and stick it down onto the foreground layer. All the adjustments made during editing appear immediately, giving instant feedback to final appearance. The graphic element will be fully filtered (anti-aliased) when stuck down.

ESC

7.5.8   Assign To Live Surface

Assign the selected graphic element to a live surface on an available live surface cel animation on the current page.

7.5.9   Animated Path

Applies an animation marker to the selected graphic object (e.g. shapes, cutouts etc.) in the Graphic Edit window 260. The Animation Marker dialog box 565 is displayed enabling marker configuration.

Left CTRL + Left ALT + A

Insert Anim RapidAction key 190

SEE ALSO

Changes to custom animation implementation for CG Tools version 7.1.0.6 465

7.5.10   Shapes

7.5.10.1   Rectangle

Enables the drawing of a rectangle on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing rectangles 489
Shape toolbox 319
Rectangle control set 309
Graphic Tools 266

7.5.10.2 Rounded Rect

Enables the drawing of a rounded rectangle on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing rectangles 489
Shape toolbox 319
Rectangle control set 310
Graphic Tools 266

7.5.10.3 Circle

Enables the drawing of a circle on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing circles 486
Shape toolbox 319
Circle control set 304
Graphic Tools 266

7.5.10.4 Ellipse

Enables the drawing of an ellipse on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing ellipses 486
Shape toolbox 319
Ellipse control set 305
Graphic Tools 266

7.5.10.5 Star

Enables the drawing of a star on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing stars 493
Shape toolbox 319
Star control set 312
Graphic Tools 266

7.5.10.6 **Regular Polygon**

Enables the drawing of a regular polygon on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing polygons 492
Shape toolbox 319
Polygon control set 308
Graphic Tools 266

7.5.10.7 **Line**

Enables the drawing of a line on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing lines 488
Shape toolbox 319
Line control set 306
Graphic Tools 266

7.5.10.8 **Polygon**

Enables the drawing of a polygon on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing polygons 492
Shape toolbox 319
Polygon control set 308
Graphic Tools 266

7.5.10.9 **Spline**

Enables the drawing of a spline on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing splines 491
Shape toolbox 319
Spline control set 311
Graphic Tools 266

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   402

Copyright © 2000-2006 Pixel Power Ltd.

7.5.10.10   Arc

Enables the drawing of an arc on the current page in the Graphic Edit window 260.

SEE ALSO

Drawing arcs 486
Shape toolbox 319
Arc control set 302
Graphic Tools 266

7.5.10.11   Cutout

Enables the insertion of a cutout image on the current page in the Graphic Edit window 260.

SEE ALSO

Cutouts 487
Shape toolbox 319
Cel and Clip toolbox 317
Cutout control set 305
Graphic Tools 266

7.5.11   Clocks

7.5.11.1   Digital Clock

Enables the drawing of a digital clock on the current page in the Graphic Edit window 260.

SEE ALSO

Digital clocks 495
Editing and configuring clocks 494
Clock toolbox 317
Text Line/Clock control set 312
Digital Clock Settings control tab 280
Graphic Tools 266

7.5.11.2   Date Clock

Enables the drawing of a date clock on the current page in the Graphic Edit window 260.

SEE ALSO

Date clocks 494
Editing and configuring clocks 494
Clock toolbox 317
Text Line/Clock control set 312
Date Clock Settings control tab 279

Graphic Tools 266

7.5.12 Cels / Video

7.5.12.1 Create Cel Animation

Enables the selection of the first file in an image sequence or entire video file, from which a cel animation can be created. A cel animation can then compiled from the sequence or video file and inserted into the current page foreground.

SEE ALSO

Cel and Clip toolbox 317
Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab 272
Cel Creation control tab 271
Graphic Tools 266

7.5.12.2 Create Video Clip

Enables the selection of the first file in an image sequence or entire video file, from which video clip can be created. A video clip can then compiled from the sequence or video file and inserted into the current page foreground.

SEE ALSO

Cel and Clip toolbox 317
Clip Creation control tab 275
Video clips 497
Graphic Tools 266

7.5.12.3 Cel Animation

Inserts a compiled cel animation with the .CEL extension into the current page foreground.

Cell/Logo RapidAction key + SHIFT 187

Insert Cell RapidAction key 190

SEE ALSO

Cel and Clip toolbox 317
Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab 272
Cel Playback Settings control tab 276
Triggers control tab 296
Graphic Tools 266

7.5.12.4 Paste Live

Paste a live video object into the current page foreground.

SEE ALSO

7.5.12.5   Paste Clip [CLARITY]

Paste a video clip from a connected clip store into the current page foreground. The Clarity Explorer [362] is displayed enabling the selection of a video clip.

SEE ALSO

7.5.13   Rectangle Selector

Enables the drawing of a selection rectangle on the current page. The selected area can then be saved as an image using the Background> [419] Save Background [420] command.

7.5.14   Formatting

7.5.14.1   Left

Aligns selected graphic elements with the left boundary of the safe action area.

SEE ALSO

7.5.14.2   Right

Aligns selected graphic elements with the right boundary of the safe action area.

SEE ALSO

7.5.14.3 Top

Aligns selected graphic elements with the top boundary of the safe action area.

SEE ALSO

Configuring and displaying safe areas 263
Safe Area control tab 292

7.5.14.4 Bottom

Aligns selected graphic elements with the bottom boundary of the safe action area.

SEE ALSO

Configuring and displaying safe areas 263
Safe Area control tab 292

7.5.14.5 Centre Horizontal

Aligns selected graphic elements centrally between the left and right boundaries of the safe action area.

SEE ALSO

Configuring and displaying safe areas 263
Safe Area control tab 292

7.5.14.6 Centre Vertical

Aligns selected graphic elements centrally between the top and bottom boundaries of the safe action area.

SEE ALSO

Configuring and displaying safe areas 263
Safe Area control tab 292

7.5.15 Fill Mode

7.5.15.1 Open

Only available when a polygon or spline graphic element is selected.

Assigns the Open mode to the selected polygon or spline.

SEE ALSO

Polygons and splines 490
Spline types 491

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   406

Copyright © 2000-2006 Pixel Power Ltd.

Spline and polygon modes 491

7.5.15.2   Closed

Only available when a polygon or spline graphic element is selected.

Assigns the Closed mode to the selected polygon or spline.

SEE ALSO

Polygons and splines 490
Spline types 491
Spline and polygon modes 491

7.5.15.3   Filled

Only available when a polygon or spline graphic element is selected.

Assigns the Filled mode to the selected polygon or spline.

SEE ALSO

Polygons and splines 490
Spline types 491
Spline and polygon modes 491

7.5.16   Spline Type

7.5.16.1   Cubic

Only available when a spline graphic element is selected.

Assigns the Cubic spline type to the selected spline.

SEE ALSO

Polygons and splines 490
Spline types 491
Spline and polygon modes 491

7.5.16.2   Beta

Only available when a spline graphic element is selected.

Assigns the Beta spline type to the selected spline.

SEE ALSO

Polygons and splines 490
Spline types 491
Spline and polygon modes 491

7.5.16.3   Bezier

Only available when a spline graphic element is selected.

Assigns the Bezier spline type to the selected spline.

SEE ALSO

Polygons and splines 490

7.5.17   Roller Adjust All

Only available on pages containing foreground graphic elements and pages formatted with a vertical foreground motion - either a roll, or a croll of angle 90° or 270°.

Examines the height of the active roller area (the entire foreground area). Then calculates the percentage by which the height of the page would either have to be increased or decreased to make it run at a good roll speed. Subsequently adjusts the positioning of foreground graphic elements.

The Adjust Roll dialog box 559 is displayed where a change in foreground motion speed AND page length can be made.

SEE ALSO

Roller adjust functionality 527

7.6   Text

Back to Menus home 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command		Keyboard Shortcut	Tool	Availability		Conditions
					Job Edit	Page Edit	
Text Line 410				A		▪	
Text Spline 410				A		▪	
Text Page 410				A		▪	

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   408

Copyright © 2000-2006 Pixel Power Ltd.

Command	Sub menu command		Keyboard Shortcut	Tool	Availability		Conditions
					Job Edit	Page Edit	
Markers	Insert	Animation 411	Left CTRL + Left ALT + A	▣		■	Within line, spline or page.
		Field 411	Left CTRL + Left SHIFT + F	▣		■	Only within text page.
		Motion 411	Left CTRL + Left ALT + M	▣		■	Within line, spline or page.
		End 411	Left CTRL + Left SHIFT + E	▣		■	Within line, spline or page.
	Edit 412		Left CTRL + M	▣		■	Must have marker selected.
	Renumber Fields 412			▣		■	Only within text page.
	Show Field Markers 412			▣		■	
	Show Markers 412			▣		■	
	Show Formatting Characters 412			▣		■	
	Lock Field 413		Left CTRL + Left SHIFT + L	▣		■	Only within text page.
	Edit Protect 413			▣		■	Only within text page.
Justification	Left 413			▣		■	Only within text page.
	Centre 413			▣		■	Only within text page.
	Centre On Cursor 414			▣		■	Only within text page.
	Right 414			▣		■	Only within text page.
	Justify 414			▣		■	Only within text page.
	Centre Vertically 414			▣		■	Only within text page.
	Push Up 414			▣		■	Only within text page.
	Top 415			▣		■	Only within text page.
	Bottom 415			▣		■	Only within text page.
Word Wrap 415				▣			Only within text page.
Capitalise 415							Within line, spline or page.
Respace 416							Within line, spline or page.
Reverse Lines 416				▣			Only within text page.
Format Tabs 416							Only within text page.

Command	Sub menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Text Margins [416]						Only within text page.
Insert Logo [416]						Within line, spline or page.
Insert Symbol [417]						Within line, spline or page.
Inset Cel [417]						Only within text page.
Typing Direction	Left to Right Across Page [417]					Within line, spline or page.
	Right to Left Across Page [417]					Within line, spline or page.
	Left to Right Down Page [417]					Within line, spline or page.
	Right to Left Down Page [417]					Within line, spline or page.
Import Subtitle [418]						
ASCII Import [418]						
Roller Adjust Text [418]						Page must be formatted with Roll or Reverse Roll foreground animation [440].
Style Copy [418]						Only within text page.

7.6.1 Text Line

Draw a single line of text with interactive resizing under mouse control. This is the traditional way a paint & draw system would handle text.

7.6.2 Text Spline

Draw a single line of text along a spline curve with interactive spline positioning under mouse control. The editing of text along a spline combines the editing of a text line with the editing of a spline curve shape.

7.6.3 Text Page

Create a multi-line page of text under keyboard control. This is the traditional way a character generator would handle text.

Insert Text Layer RapidAction key [187]

Insert Text Layer RapidAction key [190]

7.6.4 Markers

7.6.4.1 Insert

7.6.4.1.1 Animation

Only available when editing a text page, line or spline.

Inserts an animation marker to the left of the cursor position. The Animation Marker dialog box 565 is displayed enabling marker configuration.

🔲	Left CTRL + Left ALT + A

Insert Anim RapidAction key 190

7.6.4.1.2 Field

Only available when editing a text page.

Inserts a field marker to the left of the cursor position. The Field Settings (Field) control tab 283 and Field Data Connection Settings (Data) control tab 281 are displayed on the Graphic Tools 266, enabling field marker configuration.

🔲	Left CTRL + Left Shift + F

Insert Field RapidAction key 190

Goto Field/Insert Field RapidAction key + SHIFT 186

7.6.4.1.3 Motion

Only available when editing a text page, line or spline.

Inserts a motion marker to the left of the cursor position. The Motion Marker dialog box 739 is displayed enabling marker configuration.

🔲	Left CTRL + Left ALT + M

SEE ALSO

Motion markers 514

7.6.4.1.4 End

Only available when editing a text page, line or spline.

Inserts an end marker to the left of the cursor position.

🔲	Left CTRL + Left SHIFT + E

SEE ALSO

End marker 475

7.6.4.2 Edit

Edits the selected marker and subsequently displays the relevant marker configuration dialog box or control tab on the Graphic Tools 266 .

Left CTRL + M
Double-click on the relevant marker

SEE ALSO

Animation Marker dialog box 565
Field Settings (Field) control tab 283
Field Data Connection Settings (Data) control tab 281
Motion Marker dialog box 739

7.6.4.3 Renumber Fields

Renumber all page template fields on the current page at any point.

Useful in situations where, after inserting or editing page template fields, field identification within the current page may have become disjointed, and in some cases contain repeated identification numbers.

7.6.4.4 Show Field Markers

Displays or hides field markers.

Normally, field markers are always displayed whilst editing a text element.

NOTE

This command only controls the display of field markers when editing a text element; it does not affect their operation whilst online in anyway.

7.6.4.5 Show Markers

Displays or hides markers.

Normally, text markers are always displayed whilst editing a text element.

NOTE

This command only controls the display of markers when editing a text element; it does not affect their operation whilst online in anyway.

7.6.4.6 Show Formatting Characters

Displays or hides text formatting characters (spaces, tab markers and carriage returns).

Normally, text formatting are NOT displayed whilst editing a text element.

7.6.4.7   Lock Field

Locks page template field markers on ALL text layers on the current page.

Page template fields can be locked, enabling field navigation using the Tab key. This is especially relevant when filling a page template manually. When this function is turned on, field markers are displayed in yellow instead of red.

Left CTRL + Left SHIFT + L
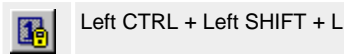
[Field Lock RapidAction key](#) 189

NOTE

Whilst page template fields are locked, Lock Fields is shown in the [Status bar](#) 249 of the [Main application window](#) 246.

7.6.4.8   Edit Protect

Protects page template field markers from being edited.

In most cases, is essential that all page templates are protected to disable any possible erroneous changes to graphical layout (e.g. the accidental deletion of page template fields), enabling only text entry within page template fields.

7.6.5   Justification

7.6.5.1   Left

Only available when editing a text page.

Left justify to left margin position selected block of text or text from the cursor line down.

[Justify RapidAction key + LEFT ARROW](#) 193

7.6.5.2   Centre

Only available when editing a text page.

Centre justify selected block of text or text from the cursor line down.

[Cntr Page Horizon/Cntr Page Vertical RapidAction key](#) 186
[Cntr Row RapidAction key](#) 186
[Justify RapidAction key + UP ARROW](#) 193

7.6.5.3   Centre On Cursor

Only available when editing a text page. No text block must be selected; text cursor must be on line of text.

Horizontally centre about the text cursor position text from the cursor line down.

7.6.5.4   Right

Only available when editing a text page.

Right justify to right margin position selected block of text or text from the cursor line down.

Justify RapidAction key + RIGHT ARROW [193]

7.6.5.5   Justify

Only available when editing a text page.

Fully justify between left and right margin positions selected block of text or text from the cursor line down.

Justify RapidAction key + DOWN ARROW [193]

7.6.5.6   Centre Vertically

Only available when editing a text page. No text block must be selected; text cursor must be on line of text.

Vertically centre text page.

Cntr Page Horizon/Cntr Page Vertical RapidAction key + SHIFT [186]

7.6.5.7   Push Up

Only available when editing a text page. No text block must be selected; text cursor must be on line of text.

Push up text page to default vertical position. Useful after extensive text page manipulation.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   414

Copyright © 2000-2006 Pixel Power Ltd.

7.6.5.8 Top

Only available when editing a text page.

When working with text typed in a vertical direction, i.e. left-to-right down page and right-to-left down page, this command becomes available to replace those valid only when working with text typed in a horizontal direction.

Top justify selected block of text or text from the cursor line down to top boundary of the current safe title area.

SEE ALSO

Text> 408 Typing Direction>Left to Right Down Page 417
Text> 408 Typing Direction>Right to Left Down Page 417

7.6.5.9 Bottom

Only available when editing a text page.

When working with text typed in a vertical direction, i.e. left-to-right down page and right-to-left down page, this command becomes available to replace those valid only when working with text typed in a horizontal direction.

Bottom justify selected block of text or text from the cursor line down to bottom boundary of the current safe title area.

SEE ALSO

Text> 408 Typing Direction>Left to Right Down Page 417
Text> 408 Typing Direction>Right to Left Down Page 417

7.6.6 Word Wrap

Only available when editing a text page.

Toggles word wrapping for current text page. The state of the word wrap command is saved with every text page. The default state is saved in the system registry.

SEE ALSO

Word wrapping 547

7.6.7 Capitalise

Changes the case of a selected block of text (character, word, line, marked block or page). Select Capitalise to cycle through the case change variations available.

SEE ALSO

Capitalisation 543

7.6.8 Respace

Re-spaces selected block of text (character, word, line, marked block or page) to the default values stored with the selected font. The character spacing of the selected block of text is reset back to the default values of the selected font.

Respace RapidAction key 191

7.6.9 Reverse Lines

Available when two or more lines are selected in a text page. Reverses the positioning of the selected lines (i.e. the top most line becomes the bottom most line within the selection) within the current text page.

7.6.10 Format Tabs

Only available when editing a text page.

Formats tabulation settings for current text page. This command displays the Edit Tabs dialog box 627 where tabulation settings can be configured.

Right-click on the horizontal ruler in the Graphic Edit window 260 and select Edit Tabs from the shortcut menu that appears.

SEE ALSO

Rulers 261
Tab markers 261

7.6.11 Text Margins

Only available when editing a text page.

Formats margin settings for current text page. This command displays the Edit Text Margins dialog box 628 where margin settings can be configured.

Right-click on the horizontal ruler in the Graphic Edit window 260 and select Edit Text Margins from the shortcut menu that appears.

SEE ALSO

Rulers 261
Margin markers 261

7.6.12 Insert Logo

Only available when editing a text page, line or spline.

Inserts a logo to the left of the cursor position. The Insert Logo dialog box 673 is displayed enabling logo selection.

Logo/Cell RapidAction key 187

Insert Logo RapidAction key 190

7.6.13   Insert Symbol

Only available when editing a text page, line or spline.

Inserts a symbol to the left of the cursor position. The Insert Symbol dialog box 675 is displayed enabling symbol selection.

7.6.14   Insert Cel

Only available when editing a text page.

Inserts a cel animation to the left of the cursor position. The Open/Insert Cel Animation dialog box 751 dialog box is displayed enabling cel animation selection.

Logo/Cell RapidAction key + SHIFT 187

Insert Cell RapidAction key 190

7.6.15   Typing Direction

7.6.15.1   Left to Right Across Page

Only available when editing a text page.

Switches to left to right typing direction across the page.

SEE ALSO

Text typing direction 547

7.6.15.2   Right to Left Across Page

Only available when editing a text page.

Switches to right to left typing direction across the page.

SEE ALSO

Text typing direction 547

7.6.15.3   Left to Right Down Page

Only available when editing a text page.

Switches to left to right typing direction down the page (top to bottom).

SEE ALSO

Text typing direction 547

7.6.15.4   Right to Left Down Page

Only available when editing a text page.

Switches to right to left typing direction down the page (bottom to top).

SEE ALSO

Text typing direction 547

7.6.16　Import Subtitle

Import subtitle file. The Subtitling dialog box 803 is displayed where a subtitle file can be selected and subtitling options can be configured. You do not have to be editing a text page to use this command. It is recommended that you see the topics listed below before using this command.

SEE ALSO

Subtitling 535
Simple guide to subtitling 535
Subtitling formats 536

7.6.17　ASCII Import

Import an ASCII text file into a page. If you a are not already editing a text page, a text page will be created on the page currently open in the Graphic Edit window 260. The ASCII Import dialog box 585 is displayed where an ASCII text file can be selection and import options configured.

When a valid ASCII text file is selected for import into a text page, the software reads the file into the page and if any Pixel Power embedded commands are encountered, they are acted upon accordingly.

SEE ALSO

ASCII Import 539

7.6.18　Roller Adjust Text

Only available on pages containing a text page and pages formatted with a vertical foreground motion - either a roll, or a croll of angle 90° or 270°.

Examines the height of the active roller area (the area between any top-of-roll or bottom-of-roll text markers that are present). Then calculates the percentage by which the height of the page would either have to be increased or decreased to make it run at a good roll speed and then adjusts the line spacing of the text page to give a suitable overall page length.

The Adjust Roll dialog box 559 is displayed where a change in foreground motion speed and page length can be made.

SEE ALSO

Roller adjust functionality 527

7.6.19　Style Copy

Only valid whilst editing a text page.

Toggles the Style Copy function (automatically pick up the styling from the character underneath the cursor). Also available using the Style Copy check box on the Text Page static control area 313 on the Graphic Tools 266 function.

Style Copy RapidAction key 192

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　　418

Copyright © 2000-2006 Pixel Power Ltd.

7.7 Background

Back to Menus home [378].

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Keyboard Shortcut	Tool	Availability		Conditions
			Job Edit	Page Edit	
Collapse Foreground [419]				■	Only when foreground page element exist and none are selected.
Save Background [420]				■	
Save Background As Still [420]				■	
Grab Video Frame [420]				■	Only available with Clarity hardware.
Display/Edit Field 1 [420]		B1		■	
Display/Edit Field 2 [420]		B2		■	
Display/Edit Both Fields [421]		B		■	
Set background layer field 1 [421]				■	
Set background layer field 2 [421]				■	
Set background layer to average of both fields [421]				■	
Undo background layer change [421]				■	Only when editing the background layer.
Redo background layer change [421]				■	Only when editing the background layer.
Paint [421]	Left CTRL + Left ALT + Left SHIFT + P	✎		■	Only when editing the background layer.
Full Tablet Painting [421]	Left CTRL + Left ALT + Left SHIFT + T			■	Only when editing the background layer.

SEE ALSO

Foreground and background editing [244]

7.7.1 Collapse Foreground

You must be working in the foreground layer for this command to be available.

Collapses any graphic elements on the page foreground layer into the page background layer.

A conformation message appears asking if you are sure that you want to proceed. You will not notice any changes to the appearance of the page. The foreground layer will become devoid of any graphic elements.

7.7.2 Save Background

Saves the background layer of the current page. Useful in instances where you have collapsed the foreground to the background layer, meaning that you can then save the background as a new picture in a variety of graphics formats.

The Save Background Image 781 dialog box is displayed.

Still Store RapidAction key + CTRL 191

7.7.3 Save Background As Still

Saves the background layer of the current page as a still image, to a designated still store location and with a designated still number. Useful in instances where you have previously collapsed the foreground to the background layer, meaning that you can then save the background as a new still image.

The Save Still dialog box 784 is displayed.

Still Store RapidAction key 191

SEE ALSO

User Preferences dialog box 809
Still Store dialog tab 730

7.7.4 Grab Video Frame [CLARITY]

Applicable to Clarity systems only.

Grab a frame of video from a selected live input. This command displays the Grab Video dialog box 669 where you can grab a frame of video to the current page background or to a file on disk.

Grab RapidAction key 190

7.7.5 Display/Edit Field 1

Selects field 1 of the background image to enable subsequent drawing operations to affect field 1 only. The background display will change to show field 1 only by temporarily duplicating the field.

7.7.6 Display/Edit Field 2

Selects field 2 of the background image to enable subsequent drawing operations to affect field 2 only. The background display will change to show field 2 only by temporarily duplicating the field.

7.7.7 Display/Edit Both Fields

Selects both fields of the background image to enable subsequent drawing operations to affect field 1 AND field 2. The background display will change to show both fields.

7.7.8 Set background layer to field 1

Set the background to display only field 1 (even when you are not editing the background layer).

7.7.9 Set background layer to field 2

Set the background to display only field 2 (even when you are not editing the background layer).

7.7.10 Set background layer to average of both fields

Set the background to display the average of both field 1 and field 2 (even when you are not editing the background layer).

7.7.11 Undo background layer change

Undo any changes made whilst editing the background layer. Only a single action is supported.

7.7.12 Redo background layer change

Redo any changes made whilst editing the background layer. Only a single action is supported.

7.7.13 Paint

Begin freehand painting. You must be in the background layer of a page for this command to be selectable. The Paint Settings control tab 290 and is displayed on the Graphic Tools 266, enabling configuration of the painting tools.

Left CTRL + Left ALT + Left SHIFT + P

7.7.14 Full Tablet Painting

<PAW>

7.8 View(Job)

Back to Menus home 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command	Keyboard shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Job View	Page Browse 423			■		
	Page List 423			■		

Command	Sub menu command	Keyboard shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Edit View	Graphics Tools 423				■	
	Layer Tree 423				■	
	Ramcorder 423				■	
	Show Key 423				■	
Audio Meters 423				■	■	Clarity only.
Data Store Viewer 423				■	■	
Global Fields Manager 424				■	■	
GPI Source Status 424				■	■	Clarity only.
Playout Controls 424				■	■	
Playout File Output 424				■	■	
Preview Window(s) 424				■	■	
Timecode Source Status 423				■	■	Clarity only.
Timeline 424				■	■	
Voice-over Controls 424				■	■	Clarity only.
VTR Control Dialog 424				■	■	Clarity only.
Zero Origin 425		Left CTRL + 0	⊞		■	
Zoom In 425		Left CTRL + -	⊕		■	
Zoom Out 425		Left CTRL + =	⊖		■	
Zoom	25% 425	Left CTRL + 8			■	
	50% 425	Left CTRL + 7	5x		■	
	100% 425	Left CTRL + 1	1x		■	
	200% 425	Left CTRL + 2	2x		■	
	400% 426	Left CTRL + 3	4x		■	
	800% 426	Left CTRL + 4	8x		■	
	1600% 426	Left CTRL + 5			■	
	3200% 426	Left CTRL + 6			■	
Toolbars	Main Toolbar 426				■	
	Job/Page Bar 426				■	
	Status Bar 426				■	
	Language Bar 427				■	
	Show All 427				■	
	Hide All 427				■	
Status Messages 427				■	■	

7.8.1 Job View

7.8.1.1 Page Browse

Displays or hides the Page Browser 251 in the Job Edit window 250.

7.8.1.2 Page List

Displays or hides the Page List 252 in the Job Edit window 250.

7.8.2 Edit View

7.8.2.1 Graphic Tools

Displays or hides the Graphic Tools 266.

7.8.2.2 Layer Tree

Displays or hides the Layer Tree 341 control box which shows how page elements are currently layered on the current page.
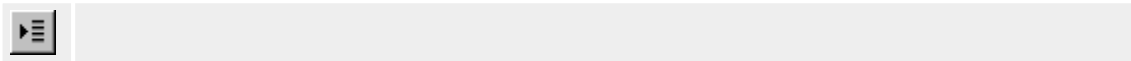
7.8.2.3 Ramcorder

Displays or hides the Ramcorder 351 control box.

7.8.2.4 Show Key

Displays or hides the key channel displayed in the background layer of pages. This menu setting is mimicked by the Display Key check box on the Key and Grid Settings control tab 285 on the Graphics Tools 266.

7.8.3 Audio Meters [CLARITY]

Displays or hides the system Audio Meters 327 where system audio levels can be monitored.

SEE ALSO

Audio metering 445

7.8.4 Data Store Viewer

Displays or hides the system Data Store Viewer 329 control box where you can view data currently stored in any Data Stores currently being used by the software.

SEE ALSO

Data Stores 468

7.8.5 Global Fields Manager

Displays or hides the system Global Fields Manager 333 control box where you have comprehensive entry and configuration of global field data that links to page template fields that have been inserted into text pages.

7.8.6 GPI Source Status [CLARITY]

Displays or hides the GPI Source Status 340 control box where the systems' GPI activity can be monitored.

7.8.7 Playout Controls

Displays or hides the Playout Controls 343 control box where you can control page playback whilst the system is online.

7.8.8 Playout File Output

Displays or hides the Playout File Output 347 control box where CG output from the UI playback channel can be recorded to a number of media file formats.

7.8.9 Preview Window(s)

Displays or hides the channel Preview Window(s) 350 control box(es) which provide a static preview of currently prepared pages on any of the available channels.

7.8.10 Timecode Source Status [CLARITY]

Displays or hides the Timecode Source Status 353 control box where the systems' timecode source activity can be monitored.

7.8.11 Timeline

Displays or hides the Timeline 355 control box where each pages' content and playout can be monitored and controlled using an easy-to-use linear timeline.

7.8.12 Voice-Over Controls [CLARITY]

Displays or hides the system Voice-Over Controls 358 control box where voice over clips can be recorded for pages from an selected audio source.

SEE ALSO

Voice over overview 549
Voice over audio configuration 550

7.8.13 VTR Control Dialog [CLARITY]

Displays or hides the VTR Control Dialog 359 control box where connected VTR(s) can be controlled and recorded from.

7.8.14   Zero Origin

Sets the zoom setting for the <u>Graphic Edit window</u> 260 to 100% and centres the page.

🖼	Left CTRL + 0

7.8.15   Zoom In

Zoom in from the current zoom level in the <u>Graphic Edit window</u> 260 to the next predefined zoom setting.

🔍	Left CTRL + =

7.8.16   Zoom Out

Zoom out from the current zoom level in the <u>Graphic Edit window</u> 260 to the next predefined zoom setting.

🔍	Left CTRL + -

7.8.17   Zoom

7.8.17.1   25%

Sets the zoom setting for the <u>Graphic Edit window</u> 260 to 25%.

Left CTRL + 8

7.8.17.2   50%

Sets the zoom setting for the <u>Graphic Edit window</u> 260 to 50%.

5x	Left CTRL + 7

7.8.17.3   100%

Sets the zoom setting for the <u>Graphic Edit window</u> 260 to 100%. This is the default setting.

1x	Left CTRL + 1

7.8.17.4   200%

Sets the zoom setting for the <u>Graphic Edit window</u> 260 to 200%.

2x	Left CTRL + 2

7.8.17.5   400%

Sets the zoom setting for the Graphic Edit window |260⌐ to 400%.

🔲	Left CTRL + 3

7.8.17.6   800%

Sets the zoom setting for the Graphic Edit window |260⌐ to 800%.

🔲	Left CTRL + 4

7.8.17.7   1600%

Sets the zoom setting for the Graphic Edit window |260⌐ to 1600%.

Left CTRL + 5

7.8.17.8   3200%

Sets the zoom setting for the Graphic Edit window |260⌐ to 3200%.

Left CTRL + 6

7.8.18   Toolbars

7.8.18.1   Main Toolbar

Hides or displays the standard application toolbar.

SEE ALSO

Standard toolbar |247⌐

7.8.18.2   Job/Page Bar

Hides or displays the Job/Page toolbar.

SEE ALSO

Job/Page toolbar |248⌐

7.8.18.3   Status Bar

Hides or displays the Status bar at the bottom of the main application window |246⌐.

SEE ALSO

Status bar |93⌐

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   426

Copyright © 2000-2006 Pixel Power Ltd.

7.8.18.4 Language Bar

Only available when <u>Options</u> 429 <u>>Language Selection>Arabic Windows</u> 433 is selected.

Hides or displays the Arabic toolbar.

SEE ALSO

<u>Arabic toolbar</u> 249

7.8.18.5 Show All

Displays all toolbars currently being displayed by the software that are available for selection from the <u>View></u> 421 Toolbars sub menu.

7.8.18.6 Hide All

Hides all toolbars currently being displayed by the software that are available for selection from the <u>View></u> 421 Toolbars sub menu.

7.8.19 Status Messages

Displays status messages within the <u>Status message window</u> 346 on the <u>Playout Controls control box</u> 343. Under normal conditions, no status messages should appear. Messages are usually related to problems that the system is experiencing during the preparation and playout of pages. Associated files that cannot be located on the current page are also listed in this window.

7.9 View(Page Stack)

<u>Back to Menus home</u> 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands and is available when a page stack is selected:

Command	Keyboard Shortcut	Tool	Availability	Conditions
			Stack Edit	
<u>Name</u> 428	Left CTRL + M		■	
<u>Index</u> 428	Left CTRL + I		■	
<u>Thumbnail</u> 428	Left CTRL + T		■	
<u>Blank Rows</u> 428	Left CTRL + B		■	
<u>Any</u> 428			■	
<u>Channel 1</u> 428			■	Only available when using a Clarity system unit.
<u>Channel 2</u> 429			■	Only available when using a dual channel Clarity system unit.
<u>Channel A3</u> 429			■	Only available when using a dual channel Clarity system unit in conjunction with additional output channel option.

Command	Keyboard Shortcut	Tool	Availability Stack Edit	Conditions
Channel A4 [429]			▪	Only available when using a dual channel Clarity system unit in conjunction with additional output channel option.
Channel UI [429]			▪	
Control [429]			▪	

7.9.1 Name

Toggles the display of page names for each stack entry in the current page stack. The page name used is the same as that shown in the Page List [252].

Left CTRL + M

7.9.2 Index

Toggles the display of page index numbers for each stack entry in the current page stack. The page index number is the number of the page in the Page List [252].

Left CTRL + I

7.9.3 Thumbnail

Toggles the display of thumbnails (as shown in the Page Browser [251]) for each stack entry in the current page stack.

Left CTRL + T

7.9.4 Blank Rows

Delete all stack entries from the current row.

Left CTRL + B

7.9.5 Any

Toggles the display of the Any column. This column enables stack entries to be played out on ANY available channel.

7.9.6 Channel 1 [CLARITY]

Toggles the display of the Channel 1 column. This column enables stack entries to be played out on Channel 1.

NOTE

Only available when using a Clarity system unit.

Not available when using Clarity PREP.

7.9.7   Channel 2 [CLARITY]

Toggles the display of the Channel 2 column. This column enables stack entries to be played out on Channel 2.

NOTE

Only available when using a dual channel Clarity system unit.

Not available when using Clarity PREP.

7.9.8   Channel A3 [CLARITY]

Toggles the display of the Channel A3 column. This column enables stack entries to be played out on Channel 1's auxiliary channel.

NOTE

Only available when using a dual channel Clarity system unit in conjunction with either of the following options:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not supported on this channel) (Clarity 200 and 300 systems only) (requires Video clip and auxiliary output option).

Not available when using Clarity PREP.

7.9.9   Channel A4 [CLARITY]

Toggles the display of the Channel A4 column. This column enables stack entries to be played out on Channel 2's auxiliary channel.

NOTE

Only available when using a dual channel Clarity system unit in conjunction with either of the following options:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not supported on this channel) (Clarity 200 systems only) (requires Video clip and auxiliary output option).

Not available when using Clarity PREP.

7.9.10   Channel UI

Toggles the display of the Channel UI column. This column enables stack entries to be played out on the software playback channel.

7.9.11   Control

Toggles the display of the Channel UI column. This column enables playout control parameters to be inserted that affect the playout of stack entries in the same row.

7.10   Options

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub Menu command	Keyboard Shortcut	Tool	Availability		Conditions
				Job Edit	Page Edit	
Preferences	User Preferences 430			■	■	
	Local Preferences 430			■	■	
	Global Preferences 430			■	■	
	Job/Stack Preferences 430			■	■	
Hardware	SD Settings 431			■	■	Clarity systems only.
	Test Patterns 431			■	■	Clarity systems only.
Job List View	Display Options 431			■	■	
Graphic Edit Window	Scroll Static Objects 431				■	
	Automatically Popup Toolbars 431				■	
Collage Import	Drive Mappings 432			■	■	
	Font Mappings 432			■	■	
Misc	Photoshop Connection Options 432			■	■	
	Apply Font Size Fix 432			■	■	
	Apply Ticker Speed Fix (Keep as Fixed Duration) 432			■	■	
	Apply Ticker Speed Fix (Convert to Fixed Speed) 433			■	■	
Language Selection	English/Windows Native 433			■	■	
	Arabic Windows 433			■	■	

7.10.1 Preferences

7.10.1.1 User Preferences

Displays the User Preferences dialog box 809 where a variety of settings can be configured for the user currently logged into the current system.

7.10.1.2 Local Preferences

Displays the Local Preferences dialog box 696 where a variety of local settings can be configured for the current system.

7.10.1.3 Global Preferences

Displays the Global Preferences dialog box 654 where global workgroup-wide system configuration can be achieved.

7.10.1.4 Job/Stack Preferences

Displays the Job Preferences dialog box 679 where CG Tools job specific configuration can be achieved.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   430

Copyright © 2000-2006 Pixel Power Ltd.

7.10.2 Hardware [CLARITY]

7.10.2.1 SD Settings

Applicable to Clarity systems only.

Displays the SD Hardware Configuration [786] dialog box where SD system hardware configuration can be achieved.

7.10.2.2 Test Patterns

Applicable to Clarity systems only.

Not yet available.

7.10.3 Job List View

7.10.3.1 Display Options

Displays the Job List View - Display Options [677] dialog box where display options relating to the Job Edit window [250] can be configured.

7.10.4 Graphic Edit Window

7.10.4.1 Scroll Static Objects

When working within the Graphic Edit window [260], by default, page elements that have a static position when the page is played out are not scrolled when editing the page. For example, with a cel animation inserted into a page, if text is typed into a text page and the text begins to span outside of the screen area, the Graphic Edit window will scroll the page area to keep the text cursor in view, but the cel animation will remain in a static position.

With the Scroll Static Objects option turned on, static objects such a cel animations will scroll within the Graphic Edit window, as shown in the example below.

Before scrolling beyond page area	After scrolling beyond page area
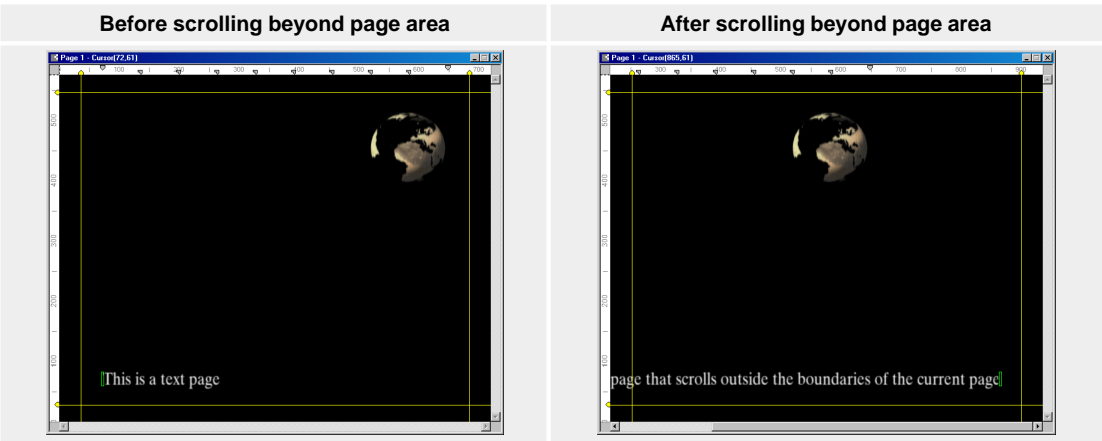
7.10.4.2 Automatically Popup Toolbars

Select this option to enable the automatic display of toolbox drop-downs on the Graphic Tools [266], instead of clicking the drop-down arrow adjacent to the toolbox.

If this option is not turned on, when you hover the mouse pointer over tool drop-down, the tooltip will appear instead of the toolbox being displayed.

7.10.5 Collage Import

7.10.5.1 Drive Mappings

This is a legacy feature intended to provide support for the loading of jobs created using our Collage 2 range of character generators.

Displays the Collage Drive Mappings dialog box [599] where drive mapping can be subsequently changed after installation.

Drive mapping was implemented at an early stage of Clarity/Collette software development. It was introduced so that jobs and associated files located on a Collage system unit could be copied to a PC running the Collette software (now not available) in conjunction with the Microsoft Windows Services for UNIX NFS client, necessary to enable communication over an ethernet network between Collage and the PC running Collette.

SEE ALSO

Drive mapping in post CG Tools 4.3.1.0 software [454]
Collage Drive Mappings dialog box [598]

7.10.5.2 Font Mappings

This is a legacy feature intended to provide support for the loading of jobs created using our Collage 2 range of character generators.

Displays the Font Mapping dialog box [642] where Collage postscript and truetype fonts can be mapped to Windows fonts

7.10.6 Misc

7.10.6.1 Photoshop Connection Options

Displays the Photoshop Connection Options dialog box [771] where you can configure Photoshop plug-in connection options.

7.10.6.2 Apply Font Size Fix

Due to a Microsoft Windows font bug, versions of the CG Tools software prior to version 4.7.1.0 performed incorrect font height calculations for some fonts. This process attempts to automatically fix the problems caused by this issue. If you are experiencing characters that are smaller than with previous versions of the software, or kerning/spacing of characters that is too wide compared to previous versions, select this command to display the Apply Font Size Fix dialog box [585].

7.10.6.3 Apply Ticker Speed Fix (Keep as Fixed Duration)

With the implementation of both fixed speed and fixed duration continuous tickers, we have introduced two possible job wide fixes that can be run to convert continuous ticker animations contained in jobs that were saved in CG Tools software versions prior to 6.4.1.7.

Keeps the speed of ticker animations constant, as in previous software versions.

Calculates the fixed duration for all text contained in continuous ticker animations, rather than the screen area. Subsequent changes to the length of text pages formatted with continuous ticker animations will affect the SPEED of the ticker animations.

7.10.6.4   Apply Ticker Speed Fix (Convert to Fixed Speed)

With the implementation of both fixed speed and fixed duration continuous tickers, we have introduced two possible job wide fixes that can be run to convert continuous ticker animations contained in jobs that were saved in CG Tools software versions prior to 6.4.1.7.

Calculates the speed of continuous ticker animations within the job and configures all continuous ticker animation markers with a constant speed calculated in pixels per field (Animation Marker dialog box 565, Settings group box 578, Speed increment box 581). Subsequent changes to the length of text pages formatted with continuous ticker animations will affect the DURATION of tickers but NOT their speed.

7.10.7   Language Selection

7.10.7.1   English/Windows Native

Selects to operate the CG Tools software in English.

7.10.7.2   Arabic Windows

Selects to operate the CG Tools software in Arabic. Displays the Arabic toolbar 249.

SEE ALSO

Configuring Microsoft® Windows® XP and CG Tools for Arabic text entry 506
Arabic toolbar 249
View(Job)> 421 Toolbars>Language Bar 427

7.11   Window

Back to Menus home 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Keyboard Shortcut	Tool	Availability		Conditions
			Job Edit	Page Edit	
Arrange Icons 433			■	■	
Reset Window Positions 433			■	■	
<Window Definitions> 434			■	■	

7.11.1   Arrange Icons

Currently provides no functionality.

7.11.2   Reset Window Positions

Useful in situations where application windows are lost or columns have been resized, and they cannot be viewed unless registry settings or XML configuration files are changed. This action displays available GUI components within the viewable screen area.

7.11.3   <Window Definitions>

Lists any application sub-windows that are currently displayed within the main application window. For instance, after starting a CG Tools application for the first time, there will be two windows listed:

ID	Name	Description
1.	Channel UI Preview	Channel preview window 350
2.	Job 1	Job Edit window 250

7.12   Help

Back to Menus home 378.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Sub menu command	Keyboard Shortcut	Tool	Availability Job Edit	Availability Page Edit	Conditions
What's New? 434				■	■	
Contents and Index 434		F1		■	■	
What's This? 434		Left SHIFT + F1	🔲?	■	■	
RapidAction Keys 435				■	■	Available only when a RapidAction keyboard is connected.
Keyboard Shortcuts 435				■	■	
Reference Manual 435				■	■	
Installation Manual 435				■	■	
About 435			?	■	■	

7.12.1   What's New?

Displays the CG Tools, Supporting Applications and Tools Reference online help with the What's New 38 topic shown.

7.12.2   Contents and Index

Displays CG Tools, Supporting Applications and Tools Reference online help. For more information on using the CG Tools Help, see Accessing help whilst using the CG Tools software 92.

7.12.3   What's This?

Switches the CG Tools software to context sensitive help mode where you can click on menu commands and tools to display help specific to that command or tool.

🔲?	Left SHIFT + F1

SEE ALSO

Context sensitive help 92
Accessing help whilst using the CG Tools software 92

7.12.4 RapidAction Keys

Available only when a RapidAction keyboard is connected.

Displays the CG Tools, Supporting Applications and Tools Reference online help with the key reference ⌐185⌐ for the connected RapidAction keyboard ⌐177⌐ shown.

7.12.5 Keyboard Shortcuts

Displays the CG Tools, Supporting Applications and Tools Reference online help showing a list of keyboard shortcuts valid for all keyboard types.

7.12.6 Reference Manual

Displays the CG Tools, Supporting Applications and Tools Reference in Adobe Acrobat .PDF format. This version is ideal for printing to hard copy.

You must have Adobe Acrobat Reader installed in order to view this file. Adobe Acrobat reader is installed with the CG Tools software. See the Adobe website for more information.

7.12.7 Installation Manual

Displays the Clarity Installation, Operational Testing and Maintenance Manual file in Adobe Acrobat .PDF format. For more information, refer to Available Clarity documentation (subject to change) ⌐105⌐.

You must have Adobe Acrobat Reader installed in order to view this file. Adobe Acrobat reader is installed with the CG Tools software. See the Adobe website for more information.

7.12.8 About

Displays the About dialog box ⌐558⌐ where information about the current CG Tool software can be viewed. Information from this dialog box may be requested by Pixel Power support to help deal with support queries.

SEE ALSO

Information required when contacting support ⌐103⌐

7.13 Licence

Back to Menus home ⌐378⌐.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command	Keyboard Shortcut	Tool	Availability		Conditions
			Job Edit	Page Edit	
Show Features ⌐436⌐			■	■	
Licence Entry ⌐436⌐			■	■	

7.13.1 Show Features

Displays the <u>Supported Features dialog box</u> 806 where you can view the features of the current CG Tools software product.

SEE ALSO

<u>Software licensing</u> 114

7.13.2 Licence Entry

Enables the entry of the licence code supplied by Pixel Power support that extends the software licence period. Displays the <u>Licence Entry dialog box</u> 736 .

SEE ALSO

<u>Software licensing</u> 114

Section 8

Learn more about
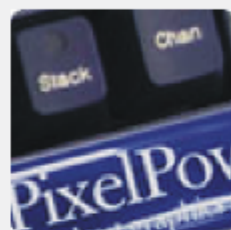
8. Learn more about

This section describes additional information that is linked to from other topics.

8.1 Animation

8.1.1 Page foreground animation

The following page foreground animation types are available.

Transition type	Description
Static	The static page animation mode is used for pages where foreground objects do not move. The Static command MUST be used when animation marker effects are included within a foreground text page.
Roll and Reverse Roll	The Roll page animation mode is used to move foreground objects for the page in a vertical upward movement. The Reverse Roll page animation mode is used to move foreground objects for the page in a vertical downward movement. Markers can be added within a page of text to control the speed, pausing, limits and end of the roll. See Motion markers [514] and End marker [475] for more information.
Crawl and Reverse Crawl	The Crawl page animation mode is used to move any foreground objects for the page in a horizontal right-to-left movement. The Reverse Crawl page animation mode is used to move any foreground objects for the page in a horizontal left-to-right movement. Markers can be added within a page of text to control the speed, pausing, limits and end of the crawl. See Motion markers [514] and End marker [475] for more information.

SEE ALSO

Animation Marker dialog box [565]
Foreground dialog tab [760]
Motion markers [514]
End marker [475]

8.1.2 Page transitional animation

The following page transition animation types are available.

Transition type	Description
Cut	Take the next page with a vertical interval switch operation.
Fade	Crossfade from one page to the next.
Fade Through Black	Crossfade page down to black, then immediately fade up next page (with no delay between the fades).
Reveal	Wipe from one page to the next with a soft edge.
Push	Push from one page to the next.
Slide Off	Slide the current page away, revealing the next one underneath.
Slide On	Slide the new page in on top of the current page.
Box	Wipe from one page to the next using a box wipe with a soft edge.
Turn Off	Horizontal or vertical page turn, revealing the next page.
Turn On	Horizontal or vertical page turn on top of the current page.
Split Horizontal	Slide each half of the page in horizontally with an optional soft edge.
Squeeze Back	Shrink the live video image on the current page to the size defined on the subsequent page.

SEE ALSO

Transition dialog tab [767]

8.1.3   Foreground animation triggering

All foreground animations with the same trigger key (regardless of whether the trigger is used of not) are part of the same animation group, and as such there playout timings affect each other.

The order number specified using the Order increment box |584⌐ in the Trigger group box |583⌐ on the Animation Marker dialog box |565⌐, is the order number within an animation group, and as such the animations in a particular animation group (as defined by the trigger key set using the Key text box |584⌐) will play out in the order of their order numbers.

So, for example, two animations with the same order number will playout at the same time, if they also have the same trigger key, but are completely independent of each other if the trigger key is different.

To make one animation independent of another, you must assign them different trigger keys, and then just specify the order numbers to suit the order that you want non-independent animations within one group to match the order you wish them to play out.

SEE ALSO

Foreground animation ordering |441⌐
Animation Marker dialog box |565⌐
Order increment box |584⌐
Trigger group box |583⌐
Key text box |584⌐

8.1.4   Foreground animation ordering

The order in which animations are played out is determined by the order number (Order increment box |584⌐ in the Trigger group box |583⌐ on the Animation Marker dialog box |565⌐) and the trigger key settings (Trigger group box |583⌐).

The Key text box in the Trigger group box |583⌐ is used to group animations together. The Order increment box |584⌐ is then used to determine the order in which the animations within this group are played out.

Note that animations are grouped in this way even if none of the animations are set to actually wait for the trigger.

Hence, the order numbers for animations on trigger key 'A' will have no effect on the order of playout for animations for trigger key 'B'; they are treated as totally separate sequences of events.

The order number simply defines the order in which the animations are played out within their trigger group. There is no problem with leaving gaps in the sequence of order numbers. If two animations share the same order number, then they will play out at the same time.

NOTE

There is a special case regarding order number 0. This special value is used to order the animations in the order that they appear within the graphic layers on the page. In this case, two animations sharing order number 0 will not play out together.

SEE ALSO

Foreground animation triggering |441⌐
Animation Marker dialog box |565⌐
Trigger group box |583⌐
Order increment box |584⌐

8.1.5   Mutually exclusive foreground animations

Mutually exclusive animation groups can be used to ensure that two or more animations can never be displayed at the same time. Any animations that share the same (non-zero) mutual group setting (Mutual group increment box |570⌐ in the Format group box |570⌐ on the Animation Marker dialog box |565⌐) are treated as being mutually exclusive.

If an animation is on-screen, then its off-move will be automatically triggered whenever another animation from the same mutual group is triggered to come on. (If there is no off-move defined for the animation, then it will cut off).

NOTE

Animations within a mutual group will normally have different trigger keys.

SEE ALSO

8.2 Audio [CLARITY]

8.2.1 What can I achieve?

Clarity lets you play audio clips back to accompany its graphics output, by associating them with the pages in a job. Audio clips can be associated with video clips, or can be used on their own.

Audio clips are stored on the same file system as Clarity video clips. They can be imported from various standard file formats (e.g. .WAV files), or recorded from external audio sources.

Multiple audio clips can be played back simultaneously with each video channel. Clips can either be routed to separate outputs, or can be internally mixed (e.g one stereo pair could be used for background music to accompany an animated background clip, whilst another channel is used for source effects to accompany text animations).

There are further mixing/routing capabilities which allow the system to e.g. receive a live program audio source and mix the clip playback audio into this source. A ducking feature allows the program audio to be ducked or muted automatically when clips are being played out.

8.2.2 System audio input and output

Apart from a basic analogue monitoring output, all I/O is digital: there are 2 AES/EBU stereo digital input channels and 2 AES/EBU stereo digital output channel per Clarity video channel. The system can also send/receive audio that is embedded into the main serial digital video input and output streams.

Up to 2 stereo channel pairs can be received and/or transmitted via each digital video stream. A typical Clarity transmission setup would receive a program video signal with embedded audio, and key its own graphics over the video, whilst inserting its playback audio into the embedded audio stream using the audio mixing/ducking features.

All audio inputs and outputs feature configurable audio delays that can be used to keep audio in sync with the video, due to video delays imposed by the Clarity itself and/or external video processing units. Audio input and output levels can be metered on-screen using configurable standard broadcast audio meters 445, and the system can also generate test audio signals.

SEE ALSO

8.2.3   Audio delays

You can configure audio delays to be inserted on embedded and AES/EBU compliant audio streams. Delays are required to synchronise an audio stream with a video stream. This is because the video stream is ALWAYS delayed as it is passed through the Clarity system. A Clarity system can be set to process video with either the minimum latent delay or with a single frame delay (introduced by a frame synchroniser).

This can be configured by using the controls in the Synchroniser Mode group box 791 on the Chan A/B dialog tab 790 on the SD Hardware Configuration dialog box 786. This dialog box can be displayed by selecting Options> 429 Hardware>SD Settings 431.

The reason that there are two configurable delays for an audio stream is as follows:

a)   the input delay is necessary so that an audio stream can be delayed to match the single frame video delay introduced by the video frame synchroniser. This ensures that both the video and audio stream are synchronised before being recorded as clips to the internal or external clip volume.

b)   the output delay is necessary so that an audio stream can be the input delay is necessary so that an audio stream can be delayed to match an additional video delay introduced by a video squeezeback.

Audio delays can be expressed in either milliseconds or frames. When working purely with audio streams that are not being synchronised with video, it is recommend that the delay is expressed in milliseconds.

SEE ALSO

Audio routing schematic (PDF) 1080
Audio delay schematic 1079
SD Hardware Configuration dialog box 786

8.2.4   Page background audio

In the same way that video clips can be assigned to a page background, you can also assign audio clips to a page background. You can select up to four audio clips that will playback via the four mono tracks (two stereo pairs) available for the channel on which the page will play out.

A1 and A2 designate the left and right 1st stereo pair, whilst A3 and A4 refer designate the left and right 2nd stereo pair for that channel.

By default, only the A1 and A3 Clip text boxes 753 and related controls are available on the A1/2/3/4 dialog sub-tab 752 of the Audio dialog tab 752 on the Page Settings dialog box 751.

This is due to high probability that you will be using a stereo audio clip, thus negating the requirement to specify a second audio clip. The right audio channel for the designated clip will be automatically played out on the right audio channel of the selected stereo pair (A2 or A4)

In situations where you do require two separate mono audio clips on the same page at the same time, you can check the Separate mono tracks box 753 to enable the A2 or A4 Clip text boxes and related controls, thus enabling you to specify an additional mono track.

NOTES

If you select to specify separate mono track and choose to utilise stereo audio clips for both tracks, respective left and right audio in the designated stereo clip will be mixed.

SEE ALSO

Audio routing schematic (PDF) 1080
X and Y audio sources 447
Audio dialog tab 752
Page Settings dialog box 751

8.2.5   Audio ducking and mixing

8.2.5.1   Ducking

Used primarily for voice overs for TV commercials. For instance if you want the background music to be reduced while the announcer is speaking. In essence ducking is the dynamic control of a signal using a second signal. There are three basic methods available with the CG Tools software.

Schematic and AES/EBU Mixer Settings group box radio button	Description
Duck SOURCE Y while clip (SOURCE X) is playing 1081	**With Duck selected in the Duck Settings group box** 701 SOURCE Y audio is faded in, kept at a predefined level whilst SOURCE X audio (clip) is active and then faded back in once SOURCE X audio (clip) is finished. **With Mute selected in the Duck Settings group box** 701 SOURCE Y audio is muted whilst SOURCE X audio (clip) is playing.
Duck SOURCE Y using SOURCE X level 1081	SOURCE Y audio is ducked after SOURCE X audio (clip) threshold is breached and then subject to a range of parameters that dictate how the ducking is applied.
Duck SOURCE Y using GPI trigger	SOURCE Y audio is ducked after selected GPI trigger is either high or low.

SEE ALSO

Audio routing schematic (PDF) 1080
Chan A/B Routing dialog sub-tab 699
Duck Settings group box 701

8.2.5.2   Mixing

Mixes Source X signal with Source Y signal.

Schematic and AES/EBU Mixer Settings group box radio button	Description
Mix X and Y 1084	SOURCE X is mixed with Source Y using the designated gain values.

SEE ALSO

Audio routing schematic (PDF) 1080
Chan A/B Routing dialog sub-tab 699
Duck Settings group box 701

8.2.6   Audio formats

You can configure the audio format of embedded and AES/EBU compliant audio streams used by Clarity. The current formats available are PCM 445 and Data 445.

SEE ALSO

Audio routing schematic (PDF) 1080
Chan A/B Routing dialog sub-tab 699
Audio Formats / Delays group box 698

8.2.6.1   Data

If you are using an audio source that you know NOT to be PCM, then you should select the Data audio format. This setting is useful when using audio that is encoded in a proprietary format (e.g. Dolby E |1130|) that you want to pass through the Clarity system architecture without being processed. Selection of this format ensures that:

a)   the Clarity sample rate converter (SRC) (see for PCM |445| more information) is turned off.
b)   subsequently, the audio data stream is not processed in any way by the Clarity system architecture and is output in exactly the same form as the input.

NOTE

When using this audio type, you must ensure that your audio source is locked to an external word clock of video reference as it will not be unconverted and locked by the sample rate converter (SRC).

SEE ALSO

Chan A/B Routing dialog sub-tab |699|
Audio Formats / Delays group box |698|
http://www.dolby.com/professional/pro_audio_engineering/solutions_dolbye.html

8.2.6.2   PCM (Pulse Code Modulation)

Pulse code modulation is a method of transferring analog information into digital signals by representing analog waveforms with a stream of digital bits forming words that relate the amplitude of a signal at a certain point (the sample).

The word length used and the number of bits used to represent the amplitude of a sample (known as quantisation), is a determinant in the quality of reproduction along with the sampling rate (the number of samples taken per second). The digital words stream out of the digital audio source in a series of ones and zeroes under pulse code modulation. Clarity can process PCM audio with a sampling rate of between 8 and 108kHz and a word length of either 16, 20 or 24-bits.

The digital audio is supplied to Clarity will usually at be sampled at a rate 44.1kHz (CD quality) or 48kHz (professional audio) and a corresponding word length e.g. 16-bit or 20-bit. When the audio signal is input into Clarity via an AES/EBU port, a sample rate converter (SRC) processes the audio to ensure that it conforms to 24-bit 48kHz audio.

In the event that the AES/EBU audio source does not match these criteria; the SRC converts the word length to 24-bit and re-samples the audio at 48 kHz. This then ensures that the digital audio within the domain of the Clarity system will comply to the format that the hardware and software expect and thus can perform any necessary processing operations upon it.

SEE ALSO

Chan A/B Routing dialog sub-tab |699|
Audio Formats / Delays group box |698|

8.2.7   Audio metering

Meters which monitor audio levels are typically one of two varieties: VU (Volume Unit) |446| or PPM (Peak Program Meters) |446|. Though both perform the same function, they accomplish the function in very different manners. A third type, Digital |446|, is also available and has been introduced by Pixel Power Ltd.

SEE ALSO

Audio routing schematic (PDF) |1080|
Input Audio Meters shortcut menu |327|
Output Audio Meters shortcut menu |328|
Audio metering |445|
Audio metering status |329|
Digital |446|
PPM (Peak Program Meters) |446|
VU (Volume Unit) |446|

8.2.7.1 Digital

Pixel Power Ltd. audio meter type, providing instant attack response for use in digital domains. Does not replicate the characteristics of analogue metering.

8.2.7.2 PPM (Peak Program Meters)

The PPM meter is becoming more popular because of the rise of digital audio devices. It is much "faster" than the VU meter and shows more clearly what is going on in the signal. As its name implies, it shows us the peaks in program material. It is calibrated in dBs with 0 dB being the maximum that the device can record without distortion. The red part of the meter is labeled "OVER" to indicate that overmodulation is taking place. In this case we have hit "over" indicating that there is no more "headroom" left.
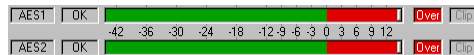
8.2.7.3 VU (Volume Unit)

The VU meter measures average sound intensity and uses the volume unit as its unit of measure. The VU is the older of the two metering systems. The VU meter does not show everything that is going on in the signal, only the average. Peaks in signal are usually not detected by the VU meter. The VU scale has a -20 (or on some -40) as the extreme left hand number on the scale. The gradations are labelled from left to right in decreasing numbers (-20,-15,-10, -7,-5,-3,-2,-1) until 0 is reached. To the right of zero the numbers are positive (+1,+2,+3,+5).
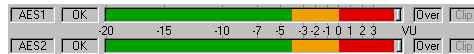
8.2.8 Audio routing

8.2.8.1 Output pairs

Pairs of outputs can be subjected to internal audio routing and they are explained below:

Output	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
Embedded A (V) 1/2	Channel A 1st stereo pair of embedded audio from one of the four available embedded groups audio output via:	VID OUT (BNC)	VID OUT (BNC)
Embedded A (V) 3/4	Channel A 2nd stereo pair of embedded audio from one of the four available embedded groups audio output via:	VID OUT (BNC)	VID OUT (BNC)
Embedded B (V) 1/2	Channel B 1st stereo pair of embedded audio from one of the four available embedded groups audio output via:	VID OUT (BNC)	N/A, no second channel available
Embedded B (V) 3/4	Channel B 2nd stereo pair of embedded audio from one of the four available embedded groups audio output via:	VID OUT (BNC)	N/A, no second channel available
AES/EBU A 1/2	Channel A 1st stereo pair output via:	AUDIO (15-pin female D-type digital audio port).	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
AES/EBU A 3/4	Channel A 2nd stereo pair output via:	AUDIO (15-pin female D-type digital audio port).	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   446

Copyright © 2000-2006 Pixel Power Ltd.

Output	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
AES/EBU B 1/2	Channel B 1st stereo pair output via:	AUDIO (15-pin female D-type digital audio port).	N/A, no second channel available.
AES/EBU B 3/4	Channel B 2nd stereo pair output via:	AUDIO (15-pin female D-type digital audio port).	N/A, no second channel available.
Analogue A 1/2	Channel A analogue monitoring stereo pair output via:	L and R (2 x RCA Phono connectors).	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type).
Analogue B 1/2	Channel B analogue monitoring stereo pair output via:	L and R (2 x RCA Phono connectors).	N/A, no second channel available.

SEE ALSO

8.2.8.2   X and Y audio sources (inputs)

One single source (X or Y) can be selected and its gain subsequently configured or two sources (X + Y) can be selected and subsequently mixed or ducked and have their gain configured independently.

Some sources are only available on dual channel systems.

Output	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
Clip Playback 1/2	1st stereo pair from background clip on current channel.	N/A (audio from internal source).	
Clip Playback 3/4	2nd stereo pair from background clip on current channel.	N/A (audio from internal source).	
Clip Playback Mix	Mix of A/1+A/2+A/3+A/4 from background clip on current channel.	N/A (audio from internal source).	
Playout Live Sources	Audio source associated with the current active live video source for the current page.	N/A (see Live Video / Audio Associations group box |704| on the Video Associations dialog sub-tab |703| on the Audio Settings dialog tab |697|).	
Playout Mix (Clips + Live)	Mix of audio source associated with the current active live video source for the current page and a mix of A/1+A/2+A/3+A/4 from background clip.	N/A (see Live Video / Audio Associations group box |704| on the Video Associations dialog sub-tab |703| on the Audio Settings dialog tab |697|).	
Embedded A(V) 1/2 Input	Channel A 1st stereo pair of embedded audio from one of the four available embedded audio groups output via:	VID IN (BNC)	VID IN (BNC)
Embedded A(V) 3/4 Input	Channel A 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via:	VID IN (BNC)	VID IN (BNC)
Embedded A(K) 1/2 Input	Channel A 1st stereo pair of embedded audio from one of the four available embedded audio groups output via:	KEY IN (BNC)	KEY IN (BNC)
Embedded A(K) 3/4 Input	Channel A 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via:	KEY IN (BNC)	KEY IN (BNC)

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Output	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
Embedded B(V) 1/2 Input	Channel B 1st stereo pair of embedded audio from one of the four available embedded audio groups output via:	VID IN (BNC)	VID IN (BNC)
Embedded B(V) 3/4 Input	Channel B 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via:	VID IN (BNC)	VID IN (BNC)
Embedded B(K) 1/2 Input	Channel B 1st stereo pair of embedded audio from one of the four available embedded audio groups output via:	KEY IN (BNC)	KEY IN (BNC)
Embedded B(K) 3/4 Input	Channel B 2nd stereo pair of embedded audio from one of the four available embedded audio groups output via:	KEY IN (BNC)	KEY IN (BNC)
AES/EBU A 1/2 Input	Channel A 1st stereo pair input via:	AUDIO (15-pin female D-type digital audio port).	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type).
AES/EBU A 3/4 Input	Channel A 2nd stereo pair input via:	AUDIO (15-pin female D-type digital audio port).	N/A, no second channel available.
AES/EBU B 1/2 Input	Channel B 1st stereo pair input via:	AUDIO (15-pin female D-type digital audio port).	N/A, no second channel available.
AES/EBU B 3/4 Input	Channel B 2nd stereo pair input via:	AUDIO (15-pin female D-type digital audio port).	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type).
Test Tone	Test tone internally generated by software	N/A (audio from internal source).	N/A (audio from internal source).

SEE ALSO

Audio routing schematic (PDF) 1080
Chan A/B Routing dialog sub-tab 699

8.3   Autoboxing text

Automatic boxes can only be used from within a text page.

The automatic boxing facility enables text to be entered together with an associated box or underline. The style of the text includes a definition for the rectangular box and its related shape style. It is useful in situations such as creating template pages for subtitle text etc. Automatic box functionality is located on the Autobox control tab 269 on the Graphic Tools 266.

Below are some autoboxing examples:

Multi Line Box

Outline Box

Underlined Text
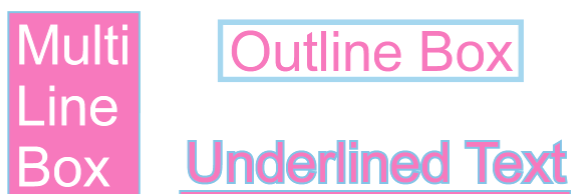
The style of the box is defined separately to that of the text with which it is drawn. As a result, there is an Autobox Style

edit mode specifically designed for defining automatic box styling attributes such as transparency, shading and edge effects. The Autobox Style edit mode can be selected using the Edit Autobox Style tool on the [Graphic Tools]315 toolbar.

8.3.1   Limitations

Whilst editing a text page, automatic boxes are drawn character by character. An automatic box rectangle will take longer to render than an equivalent rectangle drawn behind the text. This is more noticeable if an edge effect is applied to the automatic box.

If automatic boxes are to be used with animation markers, then a fully opaque box style should be used.

Automatic boxes of different styles will need to be separated by a non-boxed character or space to explicitly keep boxes apart. This enables characters of different sizes to be included within the same box.

For automatic boxing, a carriage return does not count as a box separation character.

8.4   Automatic page sequencing

The automatic sequencing of pages was introduced to enable the creation of complex animation sequences that cannot be created using a single page. The functionality enables a sequence of pages to be created which, during playout, are treated as a single page. If the sequence start page is recalled, then the entire sequence is played out as a single entry in the queue i.e. if you take the first page in a sequence then request to prepare another page, then the subsequent prepare will not occur until the entire sequence has played out.

By definition, a page sequence is a group of numerically sequential pages, where the start of a sequence is indicated by a page with a wait, and subsequent pages in the sequence have a delay of some sort. A page sequence is broken either by encountering another page formatted with a wait, or a break in the numerical sequence of active page numbers.

Pages that begin and continue an automatic page sequence are displayed within the [Page List]252 and [Page Browser]251 using special colour coding conventions which are user configurable. Refer to [A guide to how page status is displayed]257 for more information.

To enable the page sequence functionality, select [Options>]429[Job/Stack Preferences]430 and then ensure that the [Auto sequence pages box]681 is checked on the [General dialog tab]680 on the [Job Preferences dialog box]679.

8.4.1   Updating an entire page sequence remotely

When the automatic page sequencing feature is turned on, another check box is available for selection. Selecting the [Update entire sequence on remote update command check box]682 on the [General dialog tab]680 on the [Job Preferences dialog box]679 enables remote control write page and update field commands that reference a sequence start page to automatically filter down through all pages in the sequence. This enables automation control to be much simpler as the automation system can treat page sequences both as single entities for creation and update as well as playout, requiring only one entry in automation playlists.

For example, a write page command will copy all the pages of the sequence to the requested destination, and an update field command will update the field on all of the pages.

The following points should be noted when using this functionality:

a)   a field need not exist on all the pages in the sequence to be updated successfully. The system will check all of the pages for a field before returning its success or failure;

b)   automatic updates ONLY work when the FIRST sequence page is referenced; calling any of the functions with a page from within the sequence will NOT work;

c)   in background update mode ([Support remote updates in background check box]684 on the [Job Preferences dialog box]679), only one text file is created, and this is for the sequence start.

Therefore if you try to recall a page within the sequence without first recalling the sequence start page, then it could fail completely, or at the very least you are not guaranteed to have the latest data in the page.

8.5 Cel animations

8.5.1 Old .PPC versus new .CEL cel animation format

A new cel animation file format has was introduced in version 6.3.0.0 of the CG Tools software which takes the place of the previous .PPC file format. The new .CEL format has been improved and optimised to ensure more efficient playback and use of system resources. When jobs that utilise .PPC files are loaded, the .PPC files are converted to the new file format and saved to the original location with the same name, but with the .CEL file extension. Before individual files are converted, you are requested to select how field/frames are stored within each file (see Cel Field/Frame Type dialog box [594]).

A progress bar is then shown, depicting the conversion progress. Once the job is saved, it will reference the new .CEL files when subsequently reloaded. You can manually convert existing .PPC cel animations to the new .CEL format using File> [378] Convert Cel [381]. The Cel Conversion Tool dialog box [593] is displayed.

NOTE

There are a number of implications that need to be considered, depending on your system and how it is implemented within your facility:

a) jobs utilised by an automation system should be opened and re-saved manually before they are made available for automated playout;

b) there is NO backward compatibility for the new cel animation format i.e. files with the new .CEL extension cannot be utilised by CG Tools software versions earlier than 6.3.0.0;

c) files with the .PPC extension CAN be used in software versions later than 6.3.0.0 but must be converted first. Upon import, you are asked if you want to convert the selected cel. Before the file is converted, you are requested to select how field/frames are store within the file. A progress bar is then shown, depicting the conversion progress. The original file will remain but a new file with the .CEL extension will be created in the same location and this file will be inserted onto the page.

8.6 Clips and clip stores

8.6.1 Backing up and transferring clips [CLARITY]

Information regarding the back up and transferral clips is documented in the following publication.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Clarity Clip Storage and Management

If you have purchased Clarity hardware, you should have received paper copies of this publication. If you have purchased just software, you should have received a paper copy of Clarity and Clarity PREP Quick Start Guide (H059W002). If these are physically unavailable, .PDF versions are available on the Clarity, Clarity PREP and Clarity Plugin Documentation CD-ROM (SCD007) [106]. You should have received a copy of this CD-ROM with your product. Contact Pixel Power Technical Support [103] if you require further information.

8.6.2 Emulated clip stores

The Clip Store Emulation dialog tab [710] on the Local Preferences dialog box [696] enables you to specify a path that the current system will use to mimic a clip drive within a Clarity unit. In the longer term it will appear in the Clarity Explorer, enabling you to create, copy, preview and use clips on systems running Clarity PREP or on Clarity systems without a clip store.

At present, however, it has much more limited use to enable Clarity PREP to use jobs created on Clarity systems that contain clips and subsequently generate meaningful images when editing, previewing and generating browse pictures for the Pixel Power Control Centre. It is just a more powerful extension of the old per job method that could be created when jobs were copied.

The controls in the Default Clip Copy Mode group box [712] enable you to indicate how, if at all, clips are to be copied to current machine during the job copy process.

When copying to a machine without a clip store, the job copy process can now either copy the entire clip to a large .PPV file, or it can create a small .PPV file that contains just the clip header information and the selected browse

frame. This means that the non-clip capable machine can still preview, edit and use the job with all the necessary information available, but without using large amounts of disk space or requiring massive amounts of network bandwidth during the copy.

The controls in the Default Clip Copy Mode group box enable you to indicate whether this machine will accept clip files at all, and if so, whether you want to allow just the small .PPV files only.

By checking the Use Local Clip Store Emulation box [711] and selecting the Accept only header and browse frame option [712], you can make sure that the Pixel Power Control Centres' local copy of Clarity PREP can fully support the creation of browse images for jobs that contain clip content, without unduly affecting the performance of the system.

SEE ALSO

Clip Store Emulation dialog tab [710]

8.6.3 Batch recording [CLARITY]

Clarity can record multiple video/audio clips from tape (or another timecode source) in batch record mode, in which the names and timecodes of the clips to be recorded are stored in a text file. This feature is accessed by selecting Batch Record [650] on the Get/Put Clip dialog box [646]. The file that specifies the clips to be recorded can either be in the standard Avid Log Exchange (.ALE) format, or it can follow a more simple Clarity specific format, which is described in this section.

SEE ALSO

Clarity batch file format [451]
Avid Log Exchange (.ALE) files [452]
Recorded clips [452]

8.6.3.1 Clarity batch file format

Any batch file that does not have the .ALE extension is assumed to follow the simpler Clarity batch record file format. The file should be a text file containing a single line of information for each clip to be recorded. All data fields can be separated by either spaces or tabs, and any field can optionally be enclosed in double quotes (this is a requirement if clip or reel names contain spaces). Entries should be sorted in order of start timecode (within each source reel), and clips with overlapping timecodes are allowed.

Each line in the file should take the form:

```
Clip Name Track Time Code In Time Code Out Reel Name (optional)
```

for example:

```
"Clip One" V1A1A2 10:23:00:00 10:23:10:00 "Reel One"
```

Fields	Parameters	Description
Clip Name	"NAME"	The name of the clip. This can be up to 128 characters long. It should be enclosed in quotes if there are any spaces in the name.
Track		The video and/or audio tracks to record.
	V	Video only.
	A1	Mono aural audio.
	A1A2	Stereo audio.
	VA1	Video with mono aural audio.
	VA1A2	Video with stereo audio.
Time Code In	hh:mm:ss:ff	Timecode of the first frame of the clip.
Time Code In	hh:mm:ss:ff	Timecode of the last frame of the clip.

Fields	Parameters	Description
Reel name	"NAME"	(OPTIONAL) If this field is specified, then the given reel name will be stored in the reel name field of the recorded clip. When a different reel name is encountered in the file, the user will be requested to load the next reel before the batch record continues.

8.6.3.2   Avid Log Exchange (.ALE) files

Avid .ALE format batch files are also supported. These can be entered by hand into a text editor, exported from other software, or can be created from other batch / EDL formats by various generally available conversion utilities.

The specifications of the format are found in the documentation of many Avid products, and also at:

http://24p.com/PDF/ALE_Spec.pdf.

Whilst there are many optional data fields that can be contained in this file format, Clarity only reads a subset of these. Those fields which are not recognised are simply skipped over.

Heading	Parameters	Description
Global	FIELD_DELIM, VIDEO_FORMAT, TAPE, FPS	Refer to http://24p.com/PDF/ALE_Spec.pdf.
Column	Name, Tracks, Start, End, Tape	Refer to http://24p.com/PDF/ALE_Spec.pdf.

8.6.3.3   Recorded clips

For both batch file formats, each log file entry will create a video clip and/or an audio clip. If both video and audio tracks are specified for a clip, the clip name from the file is appended with '(V)' to create the Clarity video clip name, and '(A)' to create the associated audio clip name, in accordance with general Clarity clip naming conventions. All clips are placed into the folder specified using the Get/Put Clip dialog box 646 interface.

8.7   Collage drive mappings [LEGACY INFORMATION]

8.7.1   Drive mapping in versions previous to CG Tools 4.3.1.0

Drive mapping was implemented at an early stage of CG Tools software development. It was introduced so that jobs and associated files located on a Collage system unit could be copied to a PC running the Collette software (now no longer available) in conjunction with the Microsoft Windows Services for UNIX NFS client, necessary to enable communication over an ethernet network between Collage and the PC running the Collette.

Because the filing structure used by Collage system units and the Collage software is very different to that used by a PC running the Collette software, jobs and their associated files could not be copied using Windows Explorer in the way that files can be copied between PC's on a PC network.

Even if the location of all associated files used by a desired job on a Collage system unit was known and the job and associated files were copied using normal Windows methods, when the job was loaded on the host PC using Collette, the software tried to resolve paths relevant to the local Collage filing system, not the filing system used by the host PC. As a result, the associated files could not be located by the software, even though they existed on the host PC filing system.

This restriction meant that we had to introduce a mapping system and associated job copy function. The mapping system enabled a drive on the networked Collage system unit used to store jobs and associated files to be mapped to a drive on the host PC system, explicitly known by the Collette software.

Collage Drive	Collette host PC drive
\D00 (Main)	C:\
\D01	D:\

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   452

Copyright © 2000-2006 Pixel Power Ltd.

8.7.1.1   Copying from Collage

With the drive mapping configured, when the job was copied to a host PC drive using the Copy Collage Job function (no longer available), associated files and additionally folders storing associated files were written to the mapped drive along with the job.

Using the above drive mapping as an example, if the desired job on the Collage system unit was located in `\D00\Jobs` and had one associated file located in `\D00\Jobs\Files`, when the job was copied, the folder Jobs was created on `C:\` if it did not exist already and the job was copied to that folder. The associated file was copied to a new folder `(Files)` within the `C:\Jobs` folder.

8.7.1.2   Loading and saving to/from Collette

With the drive mapping configured, when the job was loaded by Collette after being copied, the software scanned the file paths to all associated files and appended the paths using the drive mapping, thus enabling Collette to locate the associated files for the job on the host PC drive. Once the Collage job had been edited by Collette, it was saved, overwriting the copied job.

8.7.1.3   Copying back to Collage

With the drive mapping configured, when the job is copied from the host PC drive to the networked Collage system unit using the Copy Collage Job function (no longer available), the job was written to back to the original drive location (`\D00\Jobs`) and associated file was written to back to its original drive location (`\D00\Jobs\Files`). If additional associated files, located on the local host PC drive, were added to the job whilst editing using the Collette software, these files and folders were replicated on the `\D00` drive on the Collage system unit during the job copy.

8.7.1.4   How was drive mapping configured?

The mapping of a desired Collage system unit drive to a location on the host PC was conducted during the Collette for Collage installation. If another CG Tools product derivative was being installed e.g. Collette for Clarity, the ability to map drives was disabled because they were not needed.

The selected drive mapping also directed the installation of the Bitstream font collection (common to CG Tools and Collage/Graphite products) to that location, so that copied Collage jobs could subsequently locate fonts correctly. When using Collette for Collage, drive mapping could also be subsequently changed after installation using by selecting User Preferences>Drive Mapping (now Options> 429 Collage Import>Drive Mapping 432).

The Drive Mapping dialog box enabled the selection of one or more Collage drives in the format `/XNN` to map to one or more physical or partitioned drives in the format `X:\` operating on the host PC running the Collette for Collage software.

8.7.1.5   Why has drive mapping changed in post CG Tools 4.3.1.0 software?

In previous versions of the CG Tools software, drive mapping only enabled Collage jobs to be copied between a networked Collage system unit and a local drive on the host PC. Problems with the old drive mapping system included:

1.   **Multiple folder paths on a single drive could not be specified as mapped drives**

     This meant that if the host PC only had a single local drive and you were copying jobs stored on variety of different drives e.g. `\D00`, `\D01`, or `\Z0` etc. from a networked Collage system unit, jobs and additionally associated files could be overwritten on host PC mapped drives. This would have occurred if files of the same name existed within the `\D00`, `\D01`, or `\Z0` drives and had been copied previously onto the single host PC local drive.

2. **Duplicated mappings and overwritten files reduced reliability when copying edited jobs back to a Collage system unit**

   If jobs were copied from a Collage system unit to the single host PC local drive and the above problem occurred, problems could then be subsequently encountered when copying the desired job back to the networked Collage system unit. The copied job, may have, in some cases, not contained all of the required file path information necessary to write a full and correct copy of the job on the networked Collage system unit. Additionally, not all of the required associated files may have been copied, resulting in an incomplete job.

3. **Collette was unable to interpret drive mappings assigned to PC drive letters using Windows Explorer**

   If Collage drives were mapped to a PC drive letter using Windows Explorer, a subsequent job copy that used the mapping had no way of knowing if the location was a Collage drive and additionally what particular drive it was on the Collage system unit.

8.7.2 Drive mapping in post CG Tools 4.3.1.0 software

The new drive mapping system introduced into the CG Tools 4.3.10 software fundamentally mimics a Collage filing system within a virtual filing system that encompasses local and networked drives. The advantages of his method are clear:

- the manipulation of Collage content on the host local or networked drives is simplified because folder structure below the mapped drive(s) can match the filing system found on a selected Collage;
- there is reduced probability of the software creating conflicting drive mappings during a job copy due to greater flexibility when specifying mapped drives;
- the job copy mechanism always has all the information required regarding the source and destination to complete a copy successfully.

SEE ALSO

Options> 429 Collage Import>Drive Mapping 432
Collage Drive Mappings dialog box 598

8.7.2.1 Drive mapping configuration

8.7.2.1.1 During general software operation

During software operation, drive mapping can also be subsequently changed after installation by selecting Options> 429 Collage Import>Drive Mapping 432. The Collage Drive Mapping dialog box 598 is displayed. Follow the link for detailed information on configuring drive mapping using this dialog box.

8.7.2.1.2 Where is the drive mapping configuration stored?

The drive mappings for the host PC running any CG Tools software derivative are stored in a .CFG text file called `CollageDriveMap.cfg` on the installation drive in the following folder:

`C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Subfiles`

An example of the file is shown below:

```
# Machine Name
localhost
# Mapped Drive
E:\Collage 2 Drives\D00\
\D00\
# Machine Name
Networked Collage 2
# Mapped Drive
\\graphics.pixelpower.com\SCSI0
\D00\
# Mapped Drive
\\graphics.pixelpower.com\SCSI3
\D00\
```

Each remote machine that has had drives mapped is defined using the `# Machine Name` header e.g. `localhost` is the host PC running the CG Tools software derivative (this is always defined as it is configured during the software installation).

Drives available for each remote machine are listed below the `# Mapped Drive` header, with the path to the machine listed first e.g. `\\graphics.pixelpower.com\SCSI0`, then the Collage drive that was mapped appearing underneath e.g. `\D00\`.

If desired, the `CollageDriveMap.cfg` file can be copied to another host PC to replicate drive mappings for a CG Tools software derivative running on that host PC.

8.8 Contour Designs ShuttlePRO and Shuttle Xpress USB multimedia controller support

Now supported by version 7 of the CG Tools software, the range of Contour Designs multimedia controllers are powerful productivity enhancement tools for all CG Tools software derivatives, especially Clarity. The following controllers are documented in this section:

ShuttlePRO version2 [456]

NOTE

It is recommended not to install any of the Contour support software for these devices when using them with CG Tools products, as this is not required. If for some reason this has been done (e.g. to use the controller with other applications), care should be taken to prevent the emulated keypress mechanism in the ShuttlePro software from sending unwanted keypresses to Clarity.

This can be achieved by opening the ShuttlePro Control Panel and ensuring that Global Settings is selected from the Target Application drop-down list box in the Settings management group box. Ensure that for every use action present in the User action drop-down list box, Do Nothing is selected in the Computer response drop-down list box.

SEE ALSO

Installation for use with the CG Tools software AND other supported software applications [456]

8.8.1   ShuttlePRO version 2

Designed for ergonomic integrity and maximizing productivity, allowing one-hand access to the fully programmable buttons and jog/shuttle knob. Nine (9) of the buttons have removable keycaps for easy labeling and referencing.

The inner ring or 'jog' rotates through 360 degrees and provides precision frame by frame control. The outer black ring or 'shuttle' is rubberized and spring-loaded. It facilitates fast forward and rewind. You can also use the jog and shuttle for many other purposes such as scrolling, volume control, and sequencing.

Specific areas of CG Tools functionality where the ShuttlePRO can be utilised include:

- VTR control |459⌐|
- VTR control, clip recording and playback |460⌐|
- Timeline control |461⌐|
- Navigation within Clarity Explorer |461⌐|

SEE ALSO

Installation for use ONLY with the CG Tools software |456⌐|
Installation for use with the CG Tools software AND other supported software applications |456⌐|
Button labelling |458⌐|
Button and control identification |459⌐|

8.8.1.1   Installation for use ONLY with the CG Tools software

After purchasing a ShuttlePRO version 2 multimedia controller, unpack and check that you have received all items in accordance with the manufacturer's documentation.

1. With the Clarity system or PC running, insert the USB connector into an available USB port.
2. Microsoft Windows 2000 or Windows XP will spot the new hardware and utilise the standard Windows Human Interface Device driver support.

Because the CG Tools software communicates directly with the device, installation of the accompanying software and drivers is not required. You should only install the Contour support software if you want to use the ShuttlePro controller with other applications that are supported directly by the controller software.

See Installation for use with the CG Tools software AND other software applications |456⌐| for more information.

NOTE

See the Contour website (http://www.contourdesign.com/shuttlepro/) for more information on the software applications that the ShuttlePRO version 2 multimedia controller supports via the ShuttlePro Control Panel.

8.8.1.2   Installation for use with the CG Tools software AND other supported software applications

After purchasing a ShuttlePRO version 2 multimedia controller, unpack and check that you have received all items in accordance with the manufacturer's documentation.

1. With the Clarity system or PC running Clarity PREP, insert the USB connector into an available USB port.
2. Microsoft Windows 2000 or Windows XP will spot the knew hardware and utilise the standard Windows Human Interface Device driver support.
3. Insert the supplied CD-ROM and install the Contour support software, using the supplied documentation as a guide.
4. After installing the software and displaying the ShuttlePro Control Panel (as directed by the accompanying documentation), then ensure the following settings are configured.

8. Learn more about

Contour Designs ShuttlePRO and Shuttle Xpress USB multimedia controller support

5. Ensure that Global Settings is selected from the Target Application drop-down list box in the Settings management group box.
6. Ensure that for every use action present in the User action drop-down list box, Do Nothing is selected in the Computer response drop-down list box.
7. Select OK to close the ShuttlePro Control Panel.
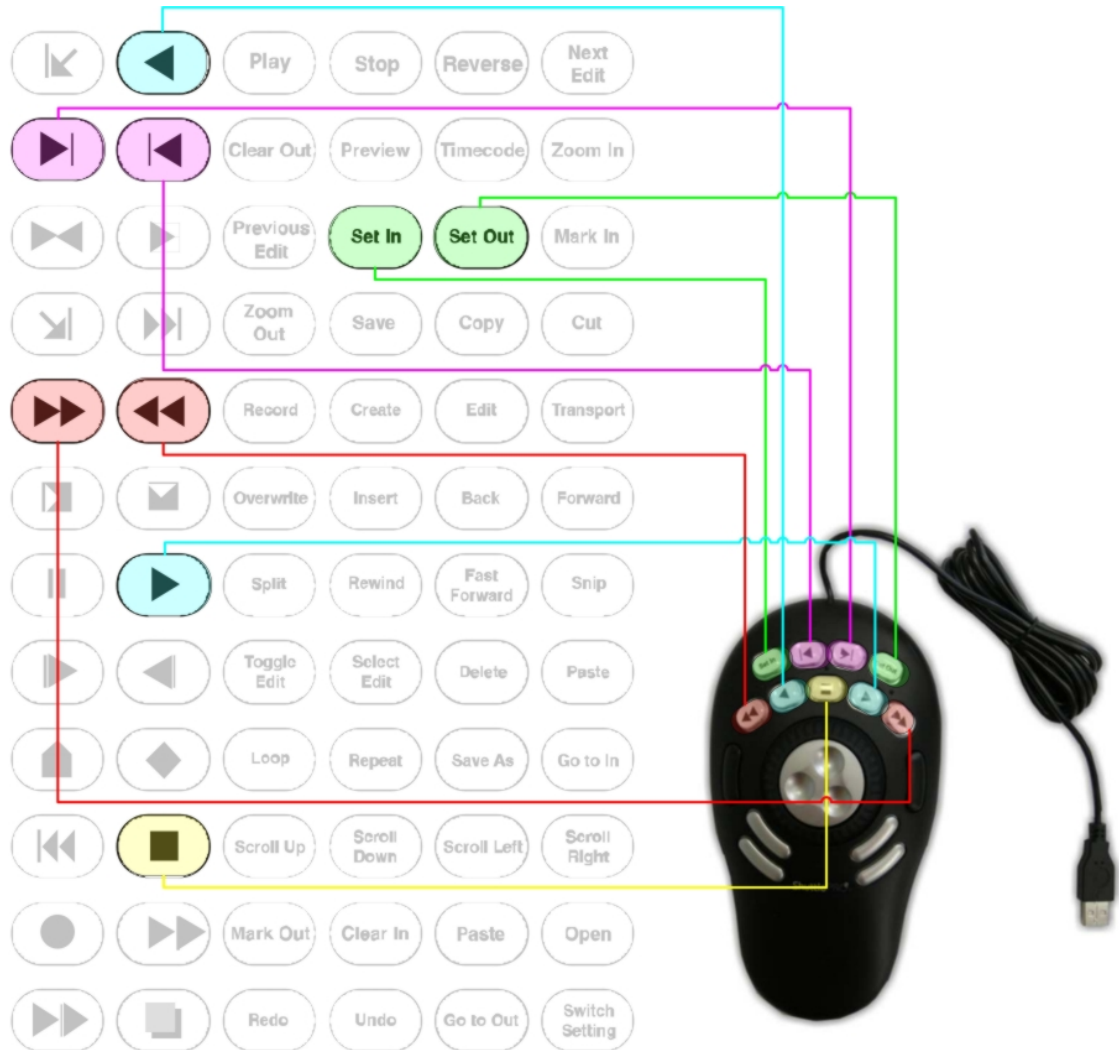
NOTE

See the Contour website (http://www.contourdesign.com/shuttlepro/) for more information on the software applications that the ShuttlePRO version 2 multimedia controller supports via the ShuttlePro Control Panel.

8.8.1.3　Button labelling

Use the diagram below as a guide when fixing the supplied labels to the 9 customisable buttons. Remove the keycaps carefully from each button, then detach the designated label from the sheet and fix in the designated locations. Button functions are explained in subsequent sections, depending on the context in which they are used.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　　458

Copyright © 2000-2006 Pixel Power Ltd.

8.8.1.4   Button and control identification

The diagram below identifies the available buttons and controls.
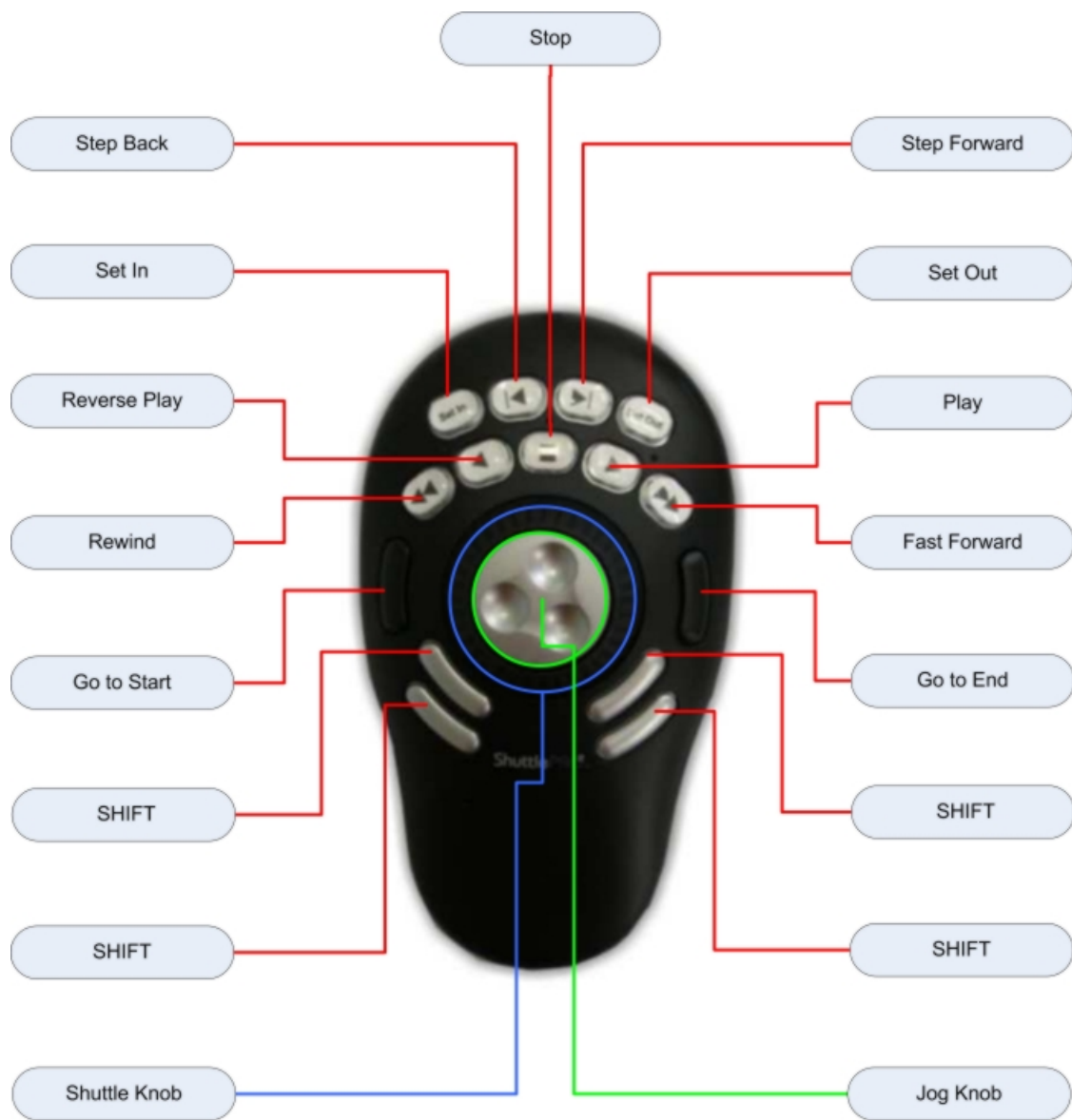
The four buttons below the wheels are used as SHIFT keys. Holding down any of these whilst pressing one of the other buttons provides access to extra functions that are specific to the currently selected window.

8.8.1.5   Using ShuttlePRO for VTR control [CLARITY]

Whenever the VTR Control Dialog control box 359 is selected, the Jog Knob and Shuttle Knob will respectively jog and shuttle the connected VTR, and the five transport keys will control its basic tape transport functions. The Step Back and Step Forward buttons will also jog the VTR by a small preset amount (because of limitations in the 9-pin VTR control protocol, this may not always be 1 video frame).

Control or Combination	Function
Fast Forward	Fast forward through tape.

Control or Combination	Function
Go to End	Fast forward to end of tape.
Go to Start	Fast rewind to beginning of tape.
Jog Knob	Jog the connected VTR back and forth.
Play	Playback tape at 1x normal speed.
Set In	N/A
Set Out	N/A
Step Back	Jog backward through the tape by a small preset amount (because of limitations in the 9-pin VTR control protocol, this may not always be 1 video frame).
Step Forward	Jog forward through the tape by a small preset amount (because of limitations in the 9-pin VTR control protocol, this may not always be 1 video frame).
Stop	Stop VTR playback.
Rewind	Fast rewind through tape.
Reverse Play	Shuttle the connected VTR back at 1x normal speed.
SHIFT x4	N/A
Shuttle Knob	Shuttle the connected VTR back and forth.

SEE ALSO

8.8.1.6   Using ShuttlePRO for VTR control, clip recording and playback [CLARITY]

When the Get/Put Clip dialog box 646 and the associated VTR Control Dialog control box 359 are selected, the Jog Knob, Shuttle Knob and transport buttons will control the connected VTR, as described below. Additionally, the Set In and Set Out buttons will set up record in and out points, and the combination of SHIFT and Play will start recording, whilst SHIFT and Stop will abort recording.

Control or Combination		Function
Fast Forward		Fast forward through tape.
Go to End		Fast forward to end of tape.
Go to Start		Fast rewind to beginning of tape.
Jog Knob		Jog the connected VTR back and forth.
Play		Playback tape at 1x normal speed.
Set In		Set record in point using current timecode.
Set Out		Set record out point using current timecode.
Step Back		Jog backward through the tape by a small preset amount (because of limitations in the 9-pin VTR control protocol, this may not always be 1 video frame).
Step Forward		Jog forward through the tape by a small preset amount (because of limitations in the 9-pin VTR control protocol, this may not always be 1 video frame).
Stop		Stop VTR playback.
Rewind		Fast rewind through tape.
Reverse Play		Shuttle the connected VTR back at 1x normal speed.
SHIFT x4	+ Play	Start recording to/from tape.
	+ Stop	Stop recording to/from tape.
Shuttle Knob		Shuttle the connected VTR back and forth.

8. Learn more about

Contour Designs ShuttlePRO and Shuttle Xpress USB multimedia controller support

___

SEE ALSO

VTR Control Dialog control box ⌐359¬
Timecode/VTR dialog tab ⌐732¬
Get/Put Clip dialog box ⌐646¬

8.8.1.7 Using ShuttlePRO for timeline control

When the Timeline control box ⌐355¬ is selected, the Jog Knob, Shuttle Knob, transport controls, Step Back and Step Forward buttons, as well as the Go to Start and Go to End buttons, will control the current cursor frame.

Control or Combination	Function
Fast Forward	N/A
Go to End	Go to start of timeline.
Go to Start	Go to end of timeline.
Jog Knob	Jog the timeline back and forth frame-by-frame.
Play	Play the timeline forwards at 1x normal speed.
Set In	N/A
Set Out	N/A
Step Back	Jog backwards through the timeline in single frame increments.
Step Forward	Jog forwards through the timeline in single frame increments.
Stop	Stop timeline playback.
Rewind	N/A
Reverse Play	Play the timeline backwards at 1x normal speed.
SHIFT x4	N/A
Shuttle Knob	Shuttle the timeline back and forth.

SEE ALSO

Timeline control box ⌐355¬

8.8.1.8 Using ShuttlePRO for navigation within Clarity Explorer

When the Clarity Explorer ⌐362¬ is selected, the Jog Knob, Step Back and Step Forward buttons will move through the list of files in the current folder. The Play button will commence a preview of the currently selected item (e.g. a clip).

Control or Combination	Function
Fast Forward	N/A
Go to End	N/A
Go to Start	N/A
Jog Knob	Step back and forth through current file listing.
Play	Preview selected file.
Set In	N/A
Set Out	N/A
Step Back	Step back through current file listing.
Step Forward	Step forward through current file listing.
Stop	N/A
Rewind	N/A
Reverse Play	N/A

Control or Combination	Function
SHIFT x4	N/A
Shuttle Knob	N/A

SEE ALSO

Clarity Explorer [362]

8.9 Cool Moves

Cool Move animation effects work by rendering characters and logos into new positions every field in real-time. Vertical size changes can also be made, allowing twist or tumble effects to be achieved. Since Cool Move animations use a software rendering process, there is a finite area of screen which can be animated.

The following animation effects are available.

Continuous Ticker [462]	Reverse Crawl [463]	Shred Through [464]	Teletype [464]
Crawl [462]	Reverse Roll [463]	Shuffle [464]	Wave [464]
Croll [463]	Reverse Roll Bounce [463]	Spiral Horizontal [464]	
Explode [463]	Roll [463]	Spiral Vertical [464]	
Plughole [463]	Shred [464]	Static [464]	

8.9.1 Cool Move limitations

A Clarity system unit can only render a finite number of characters within Cool Moves. If the Clarity system unit runs low on system resources when trying to render Cool Move animations whilst online, this will be characterised by missing frames of animation and/or missing characters. The limit is difficult to predict and may be improved by one or more of the following:

- Reduce the number of elements in the animation, or split the animation into separate animation moves which follow in sequence.

8.9.2 Descriptions

8.9.2.1 Continuous Ticker

Animates characters/logos or graphics as a continuous loop. Motion markers [514] can be used to affect animation playout.

Use the Direction [579] parameter to determine the direction of the motion. The ticker normally runs until the page playout is stopped. The ticker contents can be defined and modified during playout via automation or Data Stores [468]. Can be modified using Auto Run On Update [574], Auto Cushion Durations [574], Cut and Fade [574], End On Screen [575], Loop Indefinitely [576], Loop Times [576], Minimum Gap [576], Minimum Delay [576], Start Cushion and End Cushion [578], Start On Screen [577] and Trail Ticker Off [578]. Masks [572] are available with this animation effect.

8.9.2.2 Crawl

Animates characters/logos or graphics on/off screen as a horizontal crawl from right to left. Motion markers [514] can be used to affect animation playout.

The crawl can be modified using Auto Cushion Durations [574], End On Screen [575], Twist [582], Stagger [581], Skew [577], Start Cushion and End Cushion [578] and Centre Rotate [574]. Masks [572] are available with this animation effect.

8.9.2.3 Croll

Animates characters/logos or graphics on/off screen in the specified direction set by the Angle⌐579⌐ parameter. The croll can be modified using Auto Cushion Durations⌐574⌐, Twist⌐582⌐, Stagger⌐581⌐, Skew⌐577⌐, Start Cushion and End Cushion⌐578⌐ and Centre Rotate⌐574⌐. Use Follow⌐575⌐ to align the starting point on the x-axis for each line in a text page so that it matches the Croll angle. Masks⌐572⌐ are available with this animation effect.

8.9.2.4 Explode

Animates characters/logos or graphics on/off screen as an explode effect, where each character follows a straight line path determined by its position relative to the centre of the screen. The explode can be modified using Auto Cushion Durations⌐574⌐, Twist⌐582⌐, Stagger⌐581⌐, Skew⌐577⌐, Start Cushion and End Cushion⌐578⌐ and Centre Rotate⌐574⌐. This effect works best with a block of text centred horizontally and vertically, with no cushion or stagger and a short duration. Masks⌐572⌐ are available with this animation effect.

8.9.2.5 Plughole

Animates characters/logos or graphics as a spiral into the centre, simulating water running down a plughole. The Twist⌐582⌐ parameter controls the number of revolutions made by the text before it disappears, measured in quarters of a turn. A negative twist value reverses the spin direction. Can be modified using Auto Cushion Durations⌐574⌐, Stagger⌐581⌐, Skew⌐577⌐ and Start Cushion and End Cushion⌐578⌐. A to B⌐567⌐ moves are available with this animation effect. Masks⌐572⌐ are available with this animation effect.

8.9.2.6 Reverse Crawl

Animates characters/logos or graphics on/off screen as a horizontal crawl from left to right. Motion markers⌐514⌐ can be used to affect animation playout.

The crawl can be modified using Auto Cushion Durations⌐574⌐, End On Screen⌐575⌐, Twist⌐582⌐, Stagger⌐581⌐, Skew⌐577⌐, Start Cushion and End Cushion⌐578⌐ and Centre Rotate⌐574⌐. Masks⌐572⌐ are available with this animation effect.

8.9.2.7 Reverse Roll

Animates characters/logos or graphics on/off screen as a vertical roll downwards. Motion markers⌐514⌐ can be used to affect animation playout.

The roll can be modified by using Auto Cushion Durations⌐574⌐, Twist⌐582⌐, Stagger⌐581⌐, Start Cushion and End Cushion⌐578⌐ and Centre Rotate⌐574⌐. Masks⌐572⌐ are available with this animation effect.

8.9.2.8 Reverse Roll Bounce

Animates characters/logos or graphics on/off screen as a vertical roll downwards. The Bounces⌐579⌐ parameter controls the number of bounces performed during the animation. Stagger⌐581⌐ can also be used to create a ripple effect. A to B⌐567⌐ moves are available with this animation effect. Can be modified using Auto Cushion Durations⌐574⌐, Skew⌐577⌐ and Start Cushion and End Cushion⌐578⌐. Masks⌐572⌐ are available with this animation effect.

8.9.2.9 Roll

Animates characters/logos or graphics on/off screen as a vertical roll upwards. Motion markers⌐514⌐ can be used to affect animation playout.

The roll can be modified by using Auto Cushion Durations⌐574⌐, End On Screen⌐575⌐, Twists⌐582⌐, Stagger⌐581⌐, Start Cushion and End Cushion⌐578⌐ and Centre Rotate⌐574⌐. Masks⌐572⌐ are available with this animation effect.

8.9.2.10 Shred

Animates the characters/logos or graphics on/off screen by cutting them into a number of slices defined using the Slices [581] parameter, and then crawling alternate slices on or off screen from opposite directions, meeting in the middle and interleaving to form the text. Can be modified using Auto Cushion Durations [574], Stagger [581] and Start Cushion and End Cushion [578]. This effect works with A to B [567] moves, but some caution must be taken, as the slices may still be visible on-screen when they should not if there is not enough horizontal component to the A to B motion. Masks [572] are available with this animation effect.

8.9.2.11 Shred Through

Almost identical to Shred, but the slices carry on through the central point, leaving behind the completed characters/logos or graphics. Can be modified using Stagger [581]. A to B moves are NOT available with this animation effect. Masks [572] are available with this animation effect.

8.9.2.12 Shuffle

Animates characters/logos or graphics on/off screen with a to-and-fro snake-like motion. The Loops [580] parameter enables the number of cycles of to-and-fro movement to be specified. Can be modified using Skew [577] and Stagger [581]. A to B [567] moves are available with this animation effect. Masks [572] are available with this animation effect.

8.9.2.13 Spiral Horizontal

Animates characters/logos or graphics on/off screen in a spiral path about the centre. The initial movement is in a horizontal direction. The Twist [582] parameter controls the number of revolutions in the spiral, measured in quarters of a turn. Can be modified using Auto Cushion Durations [574], Stagger [581], Skew [577] and Start Cushion and End Cushion [578]. Masks [572] are available with this animation effect.

8.9.2.14 Spiral Vertical

Animates characters/logos or graphics on/off screen in a spiral path about the centre. The initial movement is in a vertical direction. The Twist [582] parameter controls the number of revolutions in the spiral, measured in quarters of a turn. Can be modified using Auto Cushion Durations [574], Stagger [581], Skew [577] and Start Cushion and End Cushion [578]. Masks [572] are available with this animation effect.

8.9.2.15 Static

Does not move characters/logos or graphics, but enables Auto Cushion Durations [574], Twist [582], Stagger [581], Skew [577], Start Cushion and End Cushion [578] and Centre Rotate [574] to be applied to stationary text. This effect can be used to simulate spinning characters or venetian blinds. A to B [567] moves are available with this animation effect. Masks [572] are available with this animation effect.

8.9.2.16 TeleType

Animates characters/logos on or off screen as a simulated teletype with flashing cursor. The last character in the block of text is used as a cursor; normally, this should be a rectangular plain coloured logo or suitable dingbat character. The characters appear at a rate determined by the Stagger [581] parameter, whilst the cursor flash rate is determined by the Flash Rate [580] parameter. Any remaining time after the specified duration is filled by the cursor flashing in its final position. Masks [572] are available with this animation effect.

8.9.2.17 Wave

Animates characters/logos or graphics with a 'Mexican Wave' style effect, appearing as a ripple that travels along the length of the text or graphic. This effect is unusual in that it is not an in-out type of effect; the characters/logos or graphics are on-screen both before and after the animation. Can be modified using Auto Cushion Durations [574], Stagger [581] and Start Cushion and End Cushion [578]. A to B [567] moves are available with this animation effect. Masks [572] are available with this animation effect.

8.10 Custom animations

8.10.1 Changes to custom animation implementation for CG Tools version 7.1.0.6

The way in which custom animations are accessed and stored has changed in CG Tools version 7.1.0.6. Also see:

Graphical representation of new custom animation implementation 467

Custom animations used to be stored in a `Custom Animation` folder under the CG Tools version install e.g. `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Custom Animations`.

This created a number of problems:

1. When the CG Tools software version was changed, you had to manually copy the custom animation .TXT files from the previous version folder to the new one e.g. `CG Tool 7.1/Custom Animations`.
2. Any third-party software that automatically generated the custom animation files had to be modified to write to the new location each time you upgraded the CG Tools software.
3. Since all jobs shared the same pool of custom animations, you had to be very careful that one job did not overwrite a custom animation file for another job by spreading the move index numbers around the available range. Also the Effect drop-down list box 569 on the Animation Marker dialog box 565 dialog box could easily become unusable because of the number of custom animations present in the system.
4. Because the job copy process did not necessarily know how to access the installation folder for the CG Tools software, custom animations could not be copied as part of the job copy process.

As a result of these problems, the following changes have been made in CG Tools version 7.1.0.6:

1. Custom animations for a particular job are now stored in a hidden folder beneath the folder where the job file is located, similar to the background update files also used by some jobs.

   For example, if the job is located in:

   `C:\MyJobs\MyCustomJob.ppj`

   then the custom animations for that job will be stored in the following folder path:

   `C:\MyJobs\MyCustomJob\Custom Animations`

2. The CG Tools software defaults to looking for older custom animations in the `CG Tools 7.1\Custom Animations` folder. However, if you are upgrading from a CG Tools 7.0 version installation to CG Tools version 7.1.0.6 or later, when jobs saved in a previous version that reference custom animations are loaded, they will not look for the referenced files in the correct location. You can change the default location where the software looks for custom animations using the Default Global Custom Animations Folder group box 716 on the General dialog tab 714 on the Local Preferences dialog box 696. To utilise this default this location, see the next step.
3. Where existing jobs reference custom animations that have been previously created by external scripts or software, then the external software or scripts will need to be modified to write the files into the new folder under the job file (as per the new way of working). If you do not want to do this straight away, you can specify that the job should keep checking the old location whilst it is being used. This can be achieved using the controls in the Global Custom Animations Folder group box 682 on the General dialog tab 680 on the Job Preferences dialog box 679. To specify on a per-job basis the checking of a previous location that contains older custom animation files, check the Automatically Copy New Custom Animations From Global Folder check box 683. The text box and browse button are enabled below. Again you can specify what the folder is, and saving the job will store this setting in the job file. The folder specified by default is configured using the Default Global Custom Animations Folder group box 716 on the General dialog tab 714 on the Local Preferences dialog box 696.

   With this job option set:

   • the software will copy all of the custom animations used by the job from the location defined using the Global Custom Animations Folder group box to a Custom Animation folder beneath the folder where the job file is located e.g. `C:\MyJobs\MyCustomJob\Custom Animations`;
   • the software will subsequently check for updated custom animation files in the specified location before every attempt to playout a custom animation. If the file is newer, it will be re-copied to the local job folder e.g. `C:\MyJobs\MyCustomJob\Custom Animations`.

4. The Animation Marker dialog box 565 has now been changed. With the Advanced state shown 565, if you select Custom Animation from the Effect drop-down list box 569, controls related to the selection of custom animations (<custom animation> list box 567, Delete button 568, Export button 570, Import button 571 and New button 573)

are shown in the [Effect group box](#) 569 on the related tab as per selection of the options in the [Format group box](#) 570.

5. The hidden `Custom Animation` folder beneath the folder where the job file is located is now copied as part of the job copy process.
6. Deleted custom animation effects can now be recovered from the Windows Recycle Bin.

NOTE

To see HIDDEN folders beneath the folders where the job files are located, you must configure Windows to display hidden folders. This is not normally necessary as all maintenance of custom animations should be conducted using the CG Tool software.

[ms-its:C:\WINDOWS\Help\folderop.chm::/win_fcab_show_file_extensions.htm](#)

8.10.2   Graphical representation of new custom animation implementation
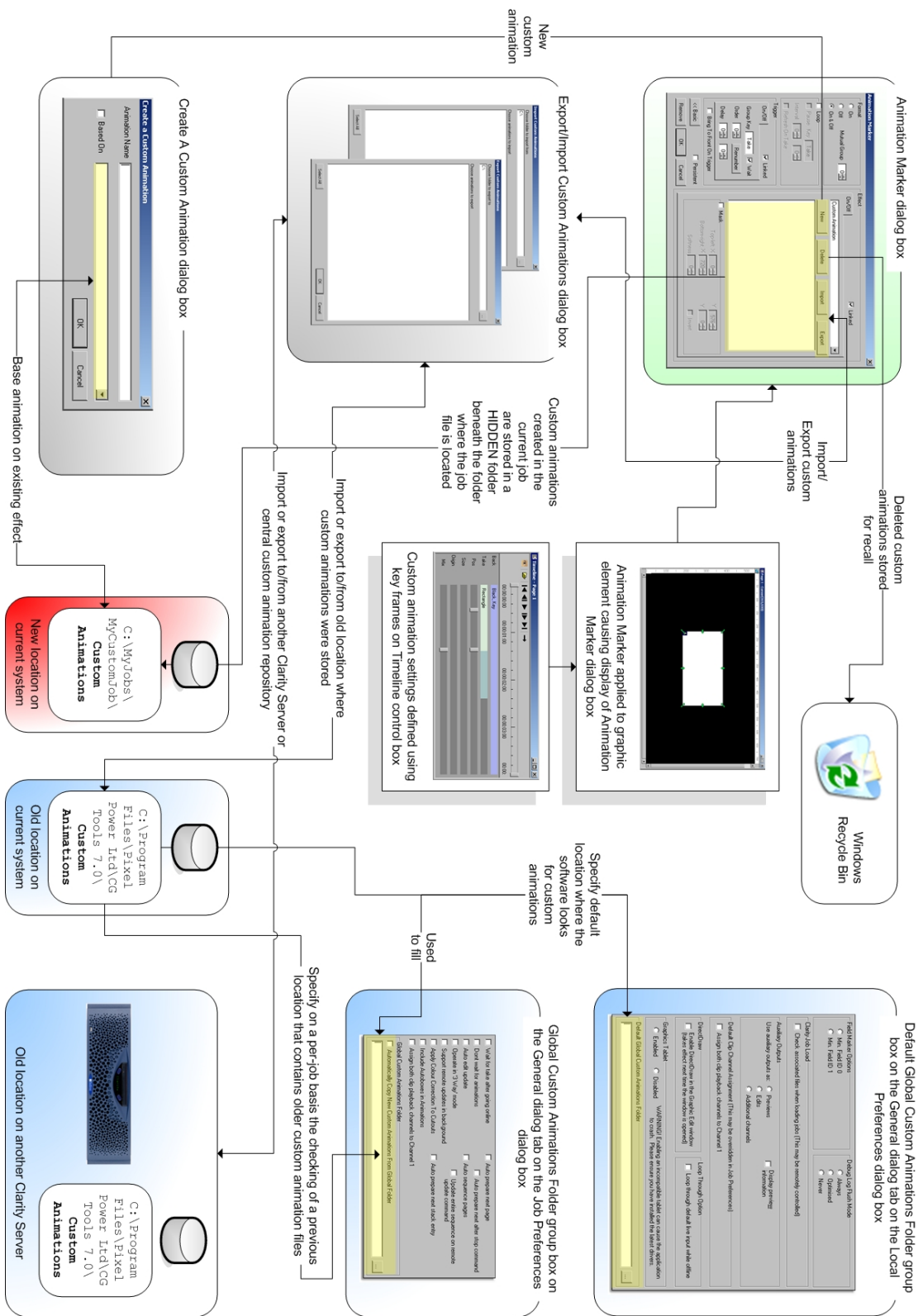
8.11   Data stores

Data Stores are repositories of XML data that can be used by page template fields within template pages. They are effectively internal data arrays within the CG Tools software from which data for template fields may be taken. In this way, the commands available for the sending of data to the machine are completely abstracted from the commands for playout.

Data Stores have a number of attributes which control the way in which the data is used. These attributes will generally only be set up on initialisation and will then be used for all data subsequently passed to a Data Store. It is however possible to change the attributes interactively or alternatively. Commands for the insertion or modification of data within the Data Store can override the defaults on an item-by-item basis.

Click here ⌐1085⌐ to see a schematic of a working example.

Data Stores are often used to update template fields within continuous ticker animations with different iterations of data over time. Data Stores are created in numerical sequence. Within each Data Store, you can store elements. Each element can store multiple data offsets which are numerically sequenced from zero.

The viewing and editing of Data Stores can also be configured using the Data Store Viewer control box ⌐329⌐. This can be displayed by selecting View> ⌐421⌐Data Store Viewer ⌐423⌐.

NOTE

As a rule, you should have a separate Data Store for every page element (text page etc.) to which you want to supply data.

8.11.1   Configuring template page fields

In the example ⌐1085⌐, a template page was created containing a single text page. Three template field markers were then inserted in a line to supply data for a continuous ticker animation. At the start of the line, a continuous ticker animation marker was inserted and configured.

Using the Field Data Connection Settings control tab ⌐281⌐, each template fields' connection was configured. Each template field was associated with incremental global fields (template field 1 was attached to global field 1 and so on). The Clarity Data Store connection type for each template field was selected from the Connection Type drop-down list box and subsequent connection settings were then configured, as shown in the table below:

Template Field	Attached to Global Field	Connection type	Data Store	Field Offset
1	1	Clarity Data Store	1	0
2	2			1
3	2			2

With the template fields configured, lets look at the other end of the data chain.

8.11.2   Supplying the XML data

In order to create a working example where page template fields are supplied with XML data via Data Stores stores, a custom application needs to written to interface between the Clarity system and the external data source via the Clarity XML Socket Server.

Pixel Power system integration staff have a number of documents available to help with the creation of this custom "middleware" application. These documents include specifications for the Clarity COM interfaces, the Clarity Socket Interface and the Clarity Serial XML protocol.

Please contact Pixel Power Support ⌐103⌐ to obtain the latest versions of these documents.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   468

Copyright © 2000-2006 Pixel Power Ltd.

8.11.3 How the example works in practice

The order of events is as follows:

1. In brief detail, the Clarity XML Socket Server is started on the Clarity system and is configured to communicate with the localhost. The Clarity software application is started automatically and a socket connection is made with the XML Socket Server. Confirmation of this is shown by messages on the user interface of the XML Socket Server. With communication between the Clarity software and the XML Socket Server initiated, the custom application is started and a port is opened on the Clarity XML Socket Server.
2. The desired job is loaded. This can be automated by the custom application if desired.
3. For best practice, the custom application should pass at least some of the XML data to the desired Data Store before Clarity is put online. Confirmation of this is shown by Data Store based messages logged on the XML Socket Server user interface.
4. The Clarity system is put online and template page cued.
5. The template page is taken and the continuous ticker animation is started. The first cycle of the continuous ticker contains field offset data from element 1 and thus displays:

    ```
    PAUL PETE MARK
    ```

6. On the second cycle, the continuous ticker contains field offset data from element 2 and thus displays:

    ```
    LEE PAM ALAN
    ```

7. On the third cycle, the continuous ticker contains field offset data from element 3 and thus displays:

    ```
    SAM DAVE NICK
    ```

8.11.4 Intelligent update of Data Stores

In the example, after the third cycle of the continuous ticker animation, a number of things theoretically could happen, depending on how the custom application supplying the data was written and how it subsequently reacts to the situation.

The Clarity COM API features a number of functions that work in conjunction within each other.

Possible actions could include:

a) repeating the cycle using the same data contained within Data Store elements 1, 2 and 3;
b) updating Data Store elements, thus replacing element 1,2 and 3 field offsets with new data;
c) adding new Data Store elements in addition to elements 1,2 and 3, thus enabling the ticker to run for a longer length of time with additional, different data, appearing after the first three cycles.

SEE ALSO

Please refer to the specifications for the Clarity COM interfaces, the Clarity Socket Interface and the Clarity Serial XML protocol for more information on the functionality available.

8.11.5 Other aspects of Data Store configuration

The Clarity COM API features a number functions to enable the configuration of Data Store attributes. These enable the configuration of such parameters as spacing, speed and type.

SEE ALSO

Please refer to the specifications for the Clarity COM interfaces, the Clarity Socket Interface and the Clarity Serial XML protocol for more information on the functionality available.

8.11.6 Viewing the current contents of Data Stores

After Data Stores have been initialised and filled with XML data, the contents of these Data Stores can be viewed using the Data Store Viewer control box 329. This can be displayed by selecting View> 421 Data Store Viewer 423.

8.12   Edge effects

Graphic elements can utilise a selection of edge, shading and shadow effects to enable easy creation of eye catching CG content. Edge effects can be applied to graphic elements using the Edge Effect control tab 281 on the Graphic Tools 266. The table below lists the edge effects available for selection and describes the effects that they produce. New or edited sections since the last release are highlighted with dark grey shading

Effect	Description
Bevel 471	Draw with a simulated bevel effect.
Block Shadow 471	Draw with a block shadow.
Block Shadow Border 471	Draw with a block shadow and border around the foreground.
Border 471	Draw with a coloured border.
Border Block Shadow 472	Draw with a border and block shadow, with the block shadow being calculated from the border and not from the foreground plane.
Border Drop Shadow 472	Draw with a border and drop shadow, with the drop shadow being calculated from the border and not from the foreground plane.
Border Halo 472	Draw with a border and a halo.
Border Soft Shadow 472	Draw with a border and soft shadow, with the shadow being calculated from the border and not from the foreground.
Double Border 472	Draw with a double border.
Double Outer Border 472	Draw with a double outer border.
Drop Shadow 473	Draw with a drop shadow.
Drop Shadow Border 473	Draw with a drop shadow and border around the foreground.
Emboss 473	Draw with a double drop shadow to simulate emboss.
Glow 473	Draw with a soft halo.
Halo 474	Draw with a soft halo.
No Edge Effect 474	Draw with no edge effect.
Outline 474	Draw a coloured outline.
Perspective Drop Shadow 474	Draw with a perspective drop shadow.
Soft Border 475	Draw with a soft edge border.
Soft Shadow 475	Draw with a soft edge drop shadow.
Soft Shadow Border 475	Draw with a soft shadow with a border around the foreground.
Soft Solid 475	Draw with a softened edge.

NOTE

- The Border Drop Shadow, Border Block Shadow, Border Soft Shadow, Double Border, Bevel and Border Halo effects will produce a border inside the original solid outline. When using these effects with text, for best results, use small border widths.
- Edge effects will take a lot longer to render when applied to a cutout picture. It is recommended that the border, outline and block-shadow sizes are kept small, in order to reduce rendering times.
- If a transparent edge or shadow is to be used with a cutout picture, then the transparency setting will have to be set to a much smaller value than normal.
- In most cases the edge effect will not be displayed whilst editing a cutout picture, and will only be rendered when the cutout picture is stuck down.

8.12.1   Bevel

Draw with a simulated bevel effect.

Only the foreground plane is drawn, affected by the foreground transparency and colour settings. The width of the bevel is set by the Border slider in the range 1 to 64 pixels.

8.12.2   Block Shadow

Draw with a block shadow.

The foreground and shadow planes are drawn, affected by the foreground and shadow colour and transparency settings. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.3   Block Shadow Border

Draw with a block shadow and border around the foreground.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow colour and transparency settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.4   Border

Draw with a coloured border.

The foreground and edge planes are drawn, affected by the edge and shadow colour and transparency settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The border edge effect can be used to simulate crude bold characters by setting the edge and foreground to the same colour.

8.12.5   Border Block Shadow

Draw with a border and block shadow, with the block shadow being calculated from the border and not from the foreground plane.

The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.6 Border Drop Shadow

Draw with a border and drop shadow, with the drop shadow being calculated from the border and not from the foreground plane.

The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.7 Border Halo

Draw with a border and a halo.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow transparency and colour settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The width of the halo is set by the Depth slider in the range 1 to 128 pixels. The softness of the halo is set by the Soft slider in the range 2 to 32. The number indicates approximately how many pixels the softness spreads over.

8.12.8 Border Soft Shadow

Draw with a border and soft shadow, with the shadow being calculated from the border and not from the foreground.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow transparency and colour settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control. The softness of the shadow is set by the Soft slider in the range 2 to 32. The number indicates approximately how many pixels the softness spreads over.

8.12.9 Double Border

Draw with a double outer border.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow colour and transparency settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The transparency and colour of the second (outer) border is configured on the shadow plane.

8.12.10 Double Outer Border

Draw with a double border.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow colour and transparency settings. The shadow planes is used as an extra border outside the edge plane. The thickness of the border is set by the Border slider in the range 1 to 64 pixels.

8.12.11 Drop Shadow

Draw with a drop shadow.

The foreground and shadow planes are drawn, affected by the foreground and shadow colour and transparency settings. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.12 Drop Shadow Border

Draw with a drop shadow and border around the foreground.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow colour and transparency settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control.

8.12.13 Emboss

Draw with a double drop shadow to simulate emboss.

The foreground plane and a double shadow are drawn, affected by the foreground and shadow transparency and foreground colour settings. The double shadow colours are always white and black, to simulate the emboss effect, and are not affected by the shadow colour. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 100 pixels. The direction of the shadow can be chosen using the Dir dial control.
For a normal emboss effect the foreground transparency should be set to 0% (i.e., no foreground) and a small emboss depth (in the range 1 to 6) should be selected.

8.12.14 Glow

Draw with a soft glow.

The foreground and shadow planes are drawn. The glow is affected by the shadow transparency and colour settings. The width of the halo is set by the Depth slider in the range 1 to 100 pixels. The softness of the halo is set by the Soft slider in the range 2 to 16. The number indicates approximately how many pixels the softness spreads over

8.12.15 Halo

Draw with a soft halo.

The foreground and shadow planes are drawn. The glow is affected by the shadow transparency and colour settings. The width of the halo is set by the Depth slider in the range 1 to 100 pixels. The softness of the halo is set by the Soft slider in the range 2 to 16. The number indicates approximately how many pixels the softness spreads over.

8.12.16 No Edge Effect

Draw with no edge effect.

The foreground plane only is drawn, affected by the foreground colour and transparency settings.

8.12.17 Outline

Draw a coloured outline.

The edge plane only is drawn, affected by the edge colour and transparency settings. If the outline edge effect is applied to a cutout, the picture will disappear leaving the coloured outline. The thickness of the outline is set by the Outline slider in the range 1 to 32 pixels.

8.12.18 Perspective Drop Shadow

Draw with a perspective drop shadow.

The foreground and shadow planes are drawn, affected by the foreground and shadow colour and transparency settings. The length of the shadow is set by the Size increment box in the range 10% to 800%. The angle subtended by the shadow to the bottom edge of the object is set by the Angle dial control and input box in the range 0 to 359 degrees. The distance of the perspective shadow from the bottom edge of the object is set by the Y Offset increment box in the range 0 to 127 pixels. The horizontal skew of the perspective vanishing point relative to the object is set by the Skew increment box in the range -99 to +99 pixels.

8.12.19   Soft Border

Draw with a soft edge border.

The foreground and edge planes are drawn, affected by the foreground and edge colour and transparency settings. The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The softness of the edge is set by the Soft slider in the range 2 to 32. The number indicates approximately how many pixels the softness spreads over. For page elements other than text pages, the soft border will not be apparent until the object is stuck down, since the editing mode does not filter the object (to maintain an interactive speed). During editing, a soft border will look the same as a normal border.

8.12.20   Soft Shadow

Draw with a soft edge drop shadow.

The foreground and shadow planes are drawn, affected by the foreground and shadow colour and transparency settings. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The softness of the shadow is set by the Soft slider in the range 2 to 16. The number indicates approximately how many pixels the softness spreads over. The direction of the shadow can be chosen using the Dir dial control. For page elements other than text pages, the soft shadow will not be apparent until the object is stuck down, since the editing mode does not filter the object (to maintain an interactive speed). During editing, a soft shadow will look the same as a drop shadow.

8.12.21   Soft Shadow Border

Draw with a soft shadow with a border around the foreground.

The foreground, edge and shadow planes are drawn, affected by the foreground, edge and shadow transparency and colour settings.
The thickness of the border is set by the Border slider in the range 1 to 64 pixels. The distance of the shadow from the page element or text is set by the Depth slider in the range 1 to 128 pixels. The direction of the shadow can be chosen using the Dir dial control. The softness of the shadow is set by the Soft slider in the range 2 to 32. The number indicates approximately how many pixels the softness spreads over.

8.12.22   Soft Solid

Draw with a softened edge.

The brushed outline will be drawn in the edge colour. Only the foreground plane is drawn, affected by the foreground transparency and colour settings.
The softness of the foreground is set by the Soft slider in the range 2 to 32. The number indicates approximately how many pixels the softness spreads over.

8.13   End marker

An end marker is used to terminate the effect of an animation marker before the end of the page. Normally, an animation marker will apply to the characters following the marker up to the next marker or the end of the page. If an end marker is inserted, the effect will apply up to and including the character to the left of the end marker. There is no user configuration available for end markers. End markers can be inserted using the <u>Text></u> 408 <u>Markers>Insert>End</u> 411 .

8.14   Field update commands

8.14.1   Page template field update commands

The following commands work in a similar way to the embedded ASCII commands [540], but can be used when updating page template fields remotely e.g. via a Microsoft Excel spreadsheet.

Command	Parameters	Value	Required	Description
`[SA]` through `[SZ]` `[sa]` through `[sb]`				Change to user defined style A-Z or a-z.
Example				
`[F4]Field [SA]four`				
Fill field 4 with "Field", then apply user defined style A, then complete field with "four".				
`[LOGO:]`				Indicates insertion of logo.
	`FILENAME`	`name`	■	Filename of logo to insert.
	`FIXEDSIZE`		OPT	Logo size.
		`0`		*Size of style.*
		`1`		*Size of logo image (default).*
	`FILLOPTION`		OPT	Logo fill type.
		`0`		*Solid (default).*
		`1`		*Cutout.*
		`2`		*Matte fill.*
	`HEIGHT`	`n pixels`	OPT	Height to use instead of style height (optional).
Example				
`[LOGO:FILENAME=C:\Blah\Blah.ppi,FIXEDSIZE=0,HEIGHT=100]`				
`[CEL:]`				Indicates insertion of cel animation.
	`FILENAME`		■	Filename of cel animation to insert.
	`PLAYMODE`		OPT	Play mode of cel animation.
		`0`		*One shot.*
		`1`		*Loop.*
		`2`		*Ping pong.*
		`3`		*Reverse one shot.*
		`4`		*Reverse loop.*
		`5`		*Reverse ping pong.*
	`STARTDELAY`	`n frames`	OPT	Number of frames delay before the cel starts (default is 0).
	`DURATION`	`n frames`	OPT	Number of frames the cel will play for (default is 0 meaning natural duration).
Example				
`[CEL:FILENAME=C:\Blah\Blah.ppc,PLAYMODE=1]`				

8.14.2   Page background field update commands

The following commands can be used when updating page background fields remotely e.g. via a Microsoft Excel spreadsheet or via the Global Fields Manager 333. These commands mirror the background settings on the Background dialog tab 756 on the Page Settings dialog box 751.

Command	Parameters	Value	Required	Description
A12				Defines stereo audio track for the page using channels A1 and A2. Equivalent to configuring an audio track using the A1/2/3/4 dialog sub-tab 752 on the Audio dialog tab 752 on the Page Settings dialog box 751.
	\<clipdrive\>	\<clipdrive\>	■	Name of physical clip drive on local system.
	\<audioclipname\>	\<audioclipname\>	■	Name of stereo audio clip that resides on the physical clip drive.
	Example			
	V+A:ClarityClipDrive\AudioClipName			
CNT				Formats page background as continued. Equivalent to setting the Continued radio button 757.
BLK				Formats page background as black. Equivalent to setting the Black radio button 757.
GOU				Formats page background as gouraud shading. Equivalent to setting the Gouraud radio button 758.
HRZ				Formats page background as horizontal shading. Equivalent to setting the Horizontal radio button 758.
PIC				Formats page background as picture. Equivalent to setting the Picture radio button 758 and specifying a picture using the Select Picture button.
	\<path\>	\<path\>	■	Path and file name of picture file.
	Example			
	PIC:C:\Blah\Blah.ppi			
SLD				Formats page background as solid. Equivalent to setting the Solid radio button 759.
V+A				Formats page background as a video clip WITH associated audio. Equivalent to setting the Video Clip radio button [CLARITY] 759.
	\<clipdrive\>	\<clipdrive\>	■	Name of physical clip drive on local system.
	\<clipname\>	\<clipname\>	■	Name of video clip that resides on the physical clip drive.
	Example			
	V+A:ClarityClipDrive\VideoClipName			
VID				Formats page background as a video clip background. Equivalent to setting the Video Clip radio button [CLARITY] 759.
	\<clipdrive\>	\<clipdrive\>	■	Name of physical clip drive on local system.
	\<clipname\>	\<clipname\>	■	Name of video clip that resides on the physical clip drive.
	Example			
	VID:ClarityClipDrive\VideoClipName			

Command	Parameters	Value	Required	Description
VRT				Formats page background as vertical shading. Equivalent to setting the Vertical radio button [759].

SEE ALSO

Writing script code for use with Clarity [528]
Page background script (PageBackgroundScript) [530]
Automation dialog tab [754]
Background associated to 'Field ID' group box [754]

8.15 Font handling during job load

Extra font information is now stored within a job. For each font used within in a job, the following information is stored when the job is saved in this version of software:

a) the Windows font name i.e. Futura CondesnedBold;
b) the english readable name i.e. Futura CondesnedBold; MHeiGBBold
c) font file name i.e. FUTUCB_.TTF; MHGBXB.TTF

The storing of this information means that if jobs are opened from across the network by another machine or are copied by the job copy process, a job knows exactly what font files it needs and can ask the user if they want to install them if they are not already installed on the host system.

During the job load process, the software checks each font used to see if it is installed on the host system (in the `C:\WINNT\FONTS` folder). If any fonts are not, the software then uses the new font information stored at the end of the job file to see if it can find the necessary font file on the host system in the `C:\JOB FONTS` folder. When the job load has completed, it displays the Font Warning dialog box [645] informing the user if it has found any fonts used by the job that are not installed on the system.

In order for the functionality listed to work properly, jobs must be loaded on a host system running this version of software and where the fonts used in the job are installed (in the `C:\WINNT\FONTS` folder). The jobs must then be re-saved using this software version to make sure all the necessary font information is stored.

8.15.1 How do font file appear in the C:\JOBFONTS folder?

During the job load process, the software also makes sure that font files are copied to the `C:\JOB FONTS` folder for all fonts installed on the system (in the `C:\WINNT\FONTS` folder) that are used in the job. It also does this during job save. During a job copy to/from a networked system, files used in the job that are stored on the host system are also copied and saved in the `C:\JOB FONTS` folder on the destination system.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   478

Copyright © 2000-2006 Pixel Power Ltd.

8.16   Graphic edit modes

Whilst editing page elements within the Graphic Edit window [260], there are seven interactive 'Graphic Edit Modes' available for selection. The graphic edit modes available for selection depend on the type and characteristics of the page element selected.

Selecting a new graphic edit mode an be achieved in a number of ways:

- by selecting a tool on the Graphic Tools [266] toolbar;
- by selecting a command from the Graphics>Graphic Mode [395] menu;

At least one graphic edit mode is always active. When a graphics edit mode is selected, the appropriate editing controls (editing handles, text cursor or vertex points) will be displayed.

Where applicable, equivalent numerical values are also provided on the various control sets on the Graphic Tools [266]. Relevant values are updated simultaneously when editing interactively with the mouse in the chosen edit mode. When a page element is being manipulated, it is not drawn with the full filtering. This provides a faster update rate, at the expense of slightly rough edges. When the page element is stuck down, full quality gaussian filtering is used.

Edit Mode	Tool	Description
Autobox Style [479]		Select this mode to edit the autobox properties of a selected block of text within a text page using the Graphic Tools [266].
Line Shading [480]		Select this mode to adjust the position of line shading [499] highlights on the foreground, edge and shadow planes [498] of a selected page element.
Point Shading [481]		Select this mode to adjust the position of point shading [499] highlights on the foreground, edge and shadow planes [498] of a selected page element.
Size and Move [482]		Select this mode to reposition a page element (except text page) from its centre or resize a page element about an edge or corner.
Text [483]		Select this mode to insert, select and delete characters within a text page, line or spline and manually update characters within a digital clock.
Texture Offset [483]		Select this mode to adjust the position of texture offsets [499] on the foreground, edge and shadow planes [499] of the selected page element or block of text.
Vertex [484]		Select this mode to insert, delete and adjust the position of spline vertex points.

8.16.1   Autobox Style

Autobox Style edit mode enables the configuration of the autobox style applied to selected text within a text page.

SEE ALSO

Autobox (Box) control tab [269]
Autoboxing text [448]
Limitations [449]

479   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

8.16.2 Line Shading

Line Shading edit mode enables the configuration of foreground, edge and shadow line shading highlights by manipulating editing handles using the mouse.
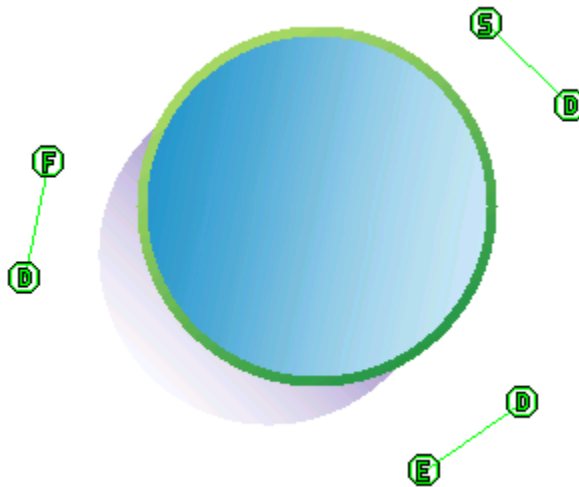
NOTE

The Line shading type ⌐499⌐ must be selected for at least one of the three planes ⌐498⌐ (foreground, edge or shadow) of the selected page element.

8.16.2.1 Using Line Shading

To use Line Shading edit mode, follow the steps below:

1. Select Graphics> ⌐395⌐Graphic Mode>Line Shading ⌐398⌐. Alternatively, you can select the Line Shading tool on the Graphic Tools ⌐266⌐ toolbar.
2. If a page element is not already selected, select it using the mouse. By default, all three line shading editing handles will be displayed, even if the Line shading type has been selected for only one of the three available planes (foreground, edge or shadow) of the selected page element.
3. The line shading editing handles are displayed on top of each other over the centre of the page element. To reposition a line shading editing handle, click + hold over the editing handle. The editing handles should disappear. Drag the mouse in the chosen direction. The page element will be re-shaded continuously to reflect the new highlight position.
4. Release the mouse button when the desired effect is achieved. The line shading editing handles re-appear.

NOTE

The Line Shading edit mode is not available for selection when editing text within text pages.

8.16.2.2 Line shading editing mode handles

The line shading editing handles perform the following functions:

Handles	Description
(F)———(D)	Use this handle to edit the line shading position (F) and direction (D) for the foreground plane of the selected page element.
(E)———(D)	Use this handle to edit the line shading position (E) and direction for (D) the edge plane of the selected page element.
(S)———(D)	Use this handle to edit the line shading position (S) and direction (D) for the shadow plane of the selected page element.

8.16.3   Point Shading

Point Shading edit mode enables the configuration of foreground, edge and shadow point shading highlights by manipulating editing handles using the mouse.
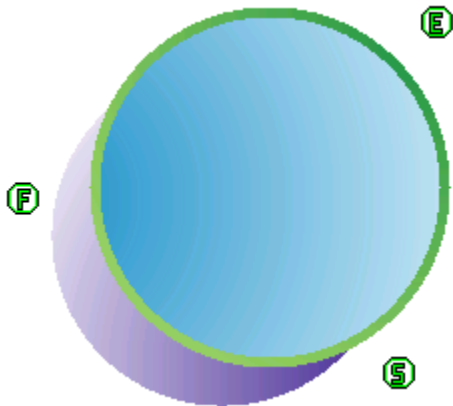
NOTE

The Point shading type [499] must be selected for at least one of the three planes [498] (foreground, edge or shadow) of the selected page element.

8.16.3.1   Using Point Shading

To use Point Shading edit mode, follow the steps below:

1.   Select Graphics> [395] Graphic Mode>Point Shading [398]. Alternatively, you can select the Point Shading tool on the Graphic Tools [266] toolbar.
2.   If a page element is not already selected, select it using the mouse. By default, all three point shading editing handles will be displayed, even if the Point shading type has been selected for only one of the three available planes (foreground, edge or shadow) of the selected page element.
3.   The point shading editing handles are displayed on top of each other over the centre of the page element. To reposition a point shading editing handle, click + hold over the editing handle. The editing handles should disappear. Drag the mouse or tablet pen in the chosen direction. The page element will be re-shaded continuously to reflect the new highlight position.
4.   Release the mouse button or pen from the tablet when the desired effect is achieved. The point shading editing handles re-appear.

NOTE

The Point Shading edit mode is not available for selection when editing text within text pages.

8.16.3.2   Point shading editing mode handles

The point shading editing handles perform the following functions:

Handle	Description
(F)	Use this handle to edit the point shading highlights for the foreground plane of the selected page element.
(E)	Use this handle to edit the point shading highlights for the edge plane of the selected page element.
(S)	Use this handle to edit the point shading highlights for the shadow plane of the selected page element.

8.16.4 Size and Move

Size and Move edit mode enables the resizing and re-positioning of page elements by manipulating editing handles using the mouse.
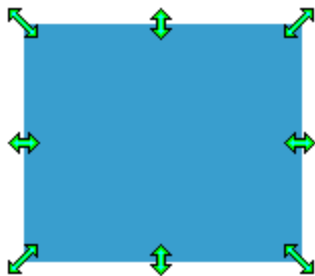
8.16.4.1 Using Size and Move

To use Size and Move edit mode, follow the steps below:

1. Select Graphics> ³⁹⁵ Graphic Mode>Size and Move ³⁹⁸. Alternatively, you can select the Size and Move tool on the Graphic Tools ²⁶⁶ toolbar.
2. If a page element is not already selected, select it using the mouse. The size and move editing handles are displayed around the page element.

8.16.4.2 Repositioning

To reposition a page element, click + hold over the page element. The size and move editing handles should disappear. Drag the page element to its new position using the mouse. Release the mouse button when the page element is in the desired position.

8.16.4.3 Resizing

After resizing in the desired way, the page element will be redrawn continuously to reflect any new size and position settings. Any applicable numeric values on the relevant control set ³⁰⁰ on the Graphic Tools ²⁶⁶ will be updated.

8.16.4.3.1 Simultaneously in both X and Y directions

To resize a page element simultaneously in both X and Y directions, click + hold over a corner editing handle. The size and move editing handles should disappear. Drag the mouse in the chosen direction. Release the mouse button when the page element is the desired size.

8.16.4.3.2 X direction only

To resize a page element in the X direction only, click + hold over a mid left or mid right editing handle. The size and move editing handles should disappear. Drag the mouse in the chosen direction. Release the mouse button when the page element is the desired size.

8.16.4.3.3 Y direction only

To resize a page element in the Y direction only, click + hold over a middle top or middle bottom editing handle. The size and move editing handles should disappear. Drag the mouse in the chosen direction. Release the mouse button when the page element is the desired size.

8.16.4.3.4   Maintaining aspect ratio

To maintain the aspect ratio of the selected page element when resizing in the chosen direction, CTRL + click + hold when selecting the desired editing handle. The ratio between the horizontal and vertical scaling percentages is maintained.

NOTE

Note that using CTRL does not force 1:1 aspect ratio; it merely maintains the ratio constant from whatever it was when the aspect drag started. To set the aspect ratio to 1:1, the scaling percentages must be set to the same number (for example, 100% for a paste at the original size).

8.16.4.3.5   About centre

To resize the selected page element about its centre when resizing in the chosen direction, CTRL + click + hold when selecting the desired editing handle.

8.16.5   Text

Text edit mode enables the insertion, selection and deletion of characters within a text page, line or spline and the manual update of characters within a digital clock. To select Text edit mode, select Graphics> 395 Graphic Mode>Text 399 . Alternatively, you can select the Edit Text tool on the Graphic Tools toolbar 315 .

8.16.6   Texture Map Offset

Texture Offset edit mode enables the configuration of foreground, edge and shadow line texture mapping offsets by manipulating editing handles using the mouse .

NOTE

The Texture Map shading type 499 must be selected for at least one of the three planes 498 (foreground, edge or shadow) of the selected page element.

8.16.6.1   Using Texture Map Offset

To use Texture Offset edit mode, follow the steps below:

1.   Select Graphics> 395 Graphic Mode>Line Shading 398 . Alternatively, you can select the Texture Offset tool on the Graphic Tools toolbar 315 .
2.   If a page element is not already selected, select it using the mouse. By default, all three texture offset editing handles will be displayed, even if the Texture Map shading style has been selected for only one of the three

available planes (foreground, edge or shadow) of the selected page element.

3. The texture offset editing handles are displayed on top of each other over the centre of the page element. To reposition a texture offset editing handle, click + hold over the editing handle. The editing handles should disappear. Drag the mouse or tablet pen in the chosen direction. The page element will be re-textured continuously to reflect the new texture offset. The numeric values on the Texture control tab [294] on the Graphics Tools [266] will also be updated.

4. Release the mouse button when the desired effect is achieved. The texture offset editing handles re-appear.

NOTE

Texture offset for a selected page element can also be configured precisely using the Texture control tab [294] on the Graphic Tools [266].

8.16.6.2 Texture offset editing mode handles

The texture offset editing handles perform the following functions:

Handles	Description
(F)	Use this handle to edit the texture mapping offset for the foreground plane of the selected page. element
(E)	Use this handle to edit the texture mapping offset for the edge plane of the selected page element.
(S)	Use this handle to edit the texture mapping offset for the shadow plane of the selected page element.

8.16.7 Vertex

Vertex edit mode enables the addition, manipulation and deletion of polygon and spline vertex points. This edit mode is used when creating and editing a text spline, polygon or cubic [491], beta [491], bezier [491] spline.
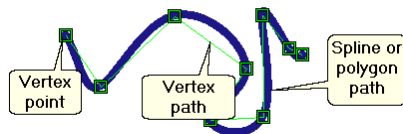
SEE ALSO

Splines and polygons [490]
Spline types [491]

8.16.7.1 Using Vertex

To use Vertex edit mode, select Graphics> [395] Graphic Mode>Vertex [399]. Alternatively, you can select the Vertex Editing tool on the Graphic Tools toolbar [315].

8.16.7.2 Adding or inserting points

To add or insert vertex points to a polygon or spline vertex path, follow the steps below:

1. Select the polygon or spline if not already selected and make sure that you are in Vertex edit mode.
2. Using the mouse or pen, position the pointer within the Graphic Edit window [260] over the vertex path, at the position where you want to add or insert a new vertex point.
3. SHIFT + click to add or insert a vertex point at the desired location.

The new vertex point appears and the vertex path re-maps accordingly.

NOTE

If a you add or insert a new vertex point in a location other than on a selected polygon or spline vertex path, the vertex

point will be added to end of the path and the path will extend accordingly to meet the new vertex point.

8.16.7.3 Manipulating points

To manipulate vertex points that you have marked or inserted, follow the steps below:

1. Select the polygon or spline if not already selected and make sure that you are in Vertex edit mode.
2. Using the mouse or pen, position the pointer within the <u>Graphic Edit window</u> 260 over the vertex point that you want to manipulate.
3. Click + hold to select the vertex point. Drag the mouse in the direction that you want to move the vertex point. When the selected vertex point reaches the desired location, release the left mouse button to mark the vertex point in its new position.

After each manipulative action, the vertex path re-maps accordingly.

8.16.7.4 Deleting points

To delete vertex points from a polygon or spline vertex path, follow the steps below:

1. Select the polygon or spline if not already selected and make sure that you are in Vertex edit mode.
2. Using the mouse or pen, position the pointer within the <u>Graphic Edit window</u> 260 over the vertex point that you want to delete.
3. CTRL + click to delete the desired vertex point from the vertex spline path.

The selected vertex point is deleted and the vertex path re-maps accordingly.

8.17 Graphic elements

8.17.1 Shapes and cutouts

The illustration below shows examples of the available shapes and a cutout image.
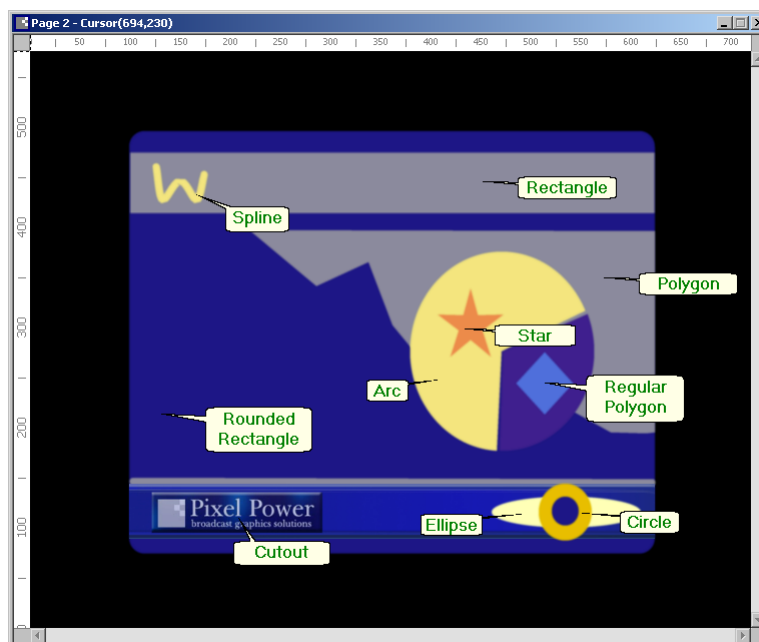
8.17.1.1 Circles, ellipses and arcs

Circles, ellipses and arc can be drawn using the respective commands in the Graphics> `395` Shapes> menu or the respective Circle, Ellipse and Arc tools in the Shape toolbox `319` on the Graphic Tools `315` toolbar.

Circle   Ellipse   Arc
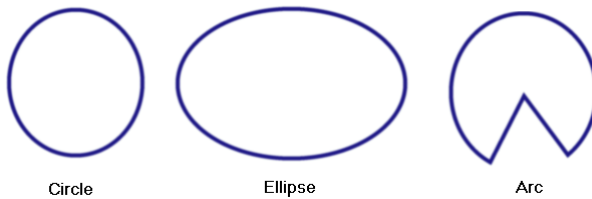
8.17.1.1.1 Drawing circles

1.   Select Graphics> `395` Shapes>Circle `401` to draw a rectangle. Alternatively, you can select the Circle tool from the Shape toolbox `319` on the Graphic Tools `266` toolbar.
2.   Using the mouse, position the pointer within the Graphic Edit window `260` where you want to start drawing the centre of the circle.
3.   Click + hold, then drag the mouse away from the centre point until you have drawn a circle of the required diameter or circumference.
4.   Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

Circle control set `304`
Editing and configuring circles, ellipses and arcs `487`
Graphic Tools `266`

8.17.1.1.2 Drawing ellipses

1.   Select Graphics> `395` Shapes>Ellipse `401` to draw a rectangle. Alternatively, you can select the Ellipse tool from the Shape toolbox `319` on the Graphic Tools `266` toolbar.
2.   Using the mouse, position the pointer within the Graphic Edit window `260` where you want to start drawing one corner of the ellipse.
3.   Click + hold, then drag the mouse away from the corner point until you have drawn an ellipse of the required x and y radius.
4.   Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

Ellipse control set `305`
Editing and configuring circles, ellipses and arcs `487`
Graphic Tools `266`

8.17.1.1.3 Drawing arcs

1.   Select Graphics> `395` Shapes>Arc `403` to draw an arc segment. Alternatively, you can select the Arc tool from the Shape toolbox `319` on the Graphic Tools `266` toolbar.
2.   Using the mouse, position the pointer within the Graphic Edit window `260` where you want to start drawing the centre of the arc segment.
3.   Click + hold, then drag the mouse away from the centre point until you have drawn an arc segment of the required radius. Release the left mouse button and then move the mouse pointer in a circular motion to specify the arc segment angle in the range 0 - 359 degrees.
4.   Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

Arc control set `302`
Editing and configuring circles, ellipses and arcs `487`
Graphic Tools `266`

8.17.1.1.4   Creating pie charts

To construct a pie chart, repeated arc segments can be drawn. The numeric values for start angle and subtended angle allow accurate construction; simply convert the percentage required into degrees by multiplying by 3.60.

8.17.1.1.5   Editing and configuring circles, ellipses and arcs

To edit a circle, ellipse or arc, position the pointer within the Graphic Edit window [260] over the shape, then click to select the shape. Alternatively, use the tools in the Select Graphic toolbox [319] to select the circle, ellipse or arc.

The Size and Move edit mode is selected and the Size and Move [482] edit handles appear around the circle, ellipse or arc.

- Edit the circle, ellipse or arc as required interactively using the mouse.
- For circles, edit the position and radius using the Circles control set [304] on the Graphic Tools [266].
- For ellipses, edit the position and radius using the Ellipse control set [305] on the Graphic Tools [266].
- For arcs, edit the position, radius, starting angle and size angle using the Arc control set [302] on the Graphic Tools [266].
- Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected line.
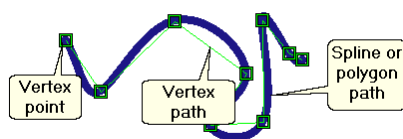
8.17.1.2   Cutouts

Cutout images of varying formats are inserted using either Graphics> [395] Shapes>Cutout [403] or the Cutout tool in the Shape toolbox [319] on the Graphic Tools [266] toolbar.

Examples of cutouts used in CG applications include maps, logos, indents, photos and straps.

8.17.1.2.1   Supported cutout picture file formats

Most of the common Windows graphics file formats are supported including .BMP, TIF, .TGA etc.; as well as the proprietary Pixel Power .PPI image file format.

8.17.1.2.2   Inserting cutouts

1. Select Graphics> [395] Shapes>Cutout [403]. Alternatively, you can select the Cutout tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar.
   The Open Cutout Picture dialog box [749] appears using the view mode that was last selected.
2. Browse to the location where the cutout is saved, then select the file from the list.
3. Select Open to close the Open Cutout Picture dialog box and import the cutout picture into the paste buffer.

8.17.1.2.3   Pasting down a cutout picture

To paste an imported cutout picture down onto the foreground or background of a selected page, follow the steps below:

1. Position the pointer within the Graphic Edit window [260] where you want to position the cutout.
2. Click + hold, then drag the mouse to mark out the area in which you want to paste the cutout picture.
   The cutout picture is pasted down of the foreground of the current page, within the marked area.

SEE ALSO

Cutout control set [305]
Editing and configuring cutouts [488]
Graphic Tools [266]

8.17.1.2.4 Editing and configuring cutout pictures

To edit a cutout, position the pointer within the Graphic Edit window ⌐260⌐ over the cutout, then click to select the clock. Alternatively, use the tools in the Select Graphic toolbox ⌐319⌐ to select the cutout.

The Size and Move ⌐482⌐ edit mode is selected and the Size and Move edit handles appear around the cutout.

- Edit the cutout as required interactively using the mouse.
- Edit the height, width, position, aspect ratio, original size and type using the Cutout control set ⌐305⌐ on the Graphic Tools ⌐266⌐.
- Use the other available control tabs ⌐266⌐ on the Graphic Tools to configure other settings for the selected cutout.

8.17.1.2.5 Substituting cutout pictures

It is possible to replace the selected cutout picture with another whilst maintaining the current cutout picture attributes. Follow the steps below:

1. Select the cutout picture if it is not already selected.
2. Click on Select on the Cutout control set ⌐305⌐. The Open Cutout Picture dialog box ⌐749⌐ appears. Browse to the location where the cutout picture is saved, then select the file from the list.
3. Select Open to close the Open Cutout Picture dialog box and import the cutout picture into the paste buffer, replacing the previous cutout picture.

The selected cutout picture within the Graphic Edit window ⌐260⌐ is replaced with the new picture, but is configured with the attributes of the previous cutout picture.

SEE ALSO

Cutout control set ⌐305⌐
Graphic Tools ⌐266⌐

8.17.1.3 Lines

Unconnected lines between two end points are drawn using either Graphics> ⌐395⌐Shapes>Line ⌐402⌐ or the Line tool in the Shape toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar.

8.17.1.3.1 Drawing lines

1. Select Graphics> ⌐395⌐Shapes>Line ⌐402⌐ to draw a spline. Alternatively, you can select the Line tool from the Shape toolbox ⌐319⌐ on the Graphic Tools ⌐266⌐ toolbar.
2. Select the polygon mode ⌐491⌐ from the Graphics>Fill Mode ⌐395⌐ menu or from the Polygon control set ⌐308⌐ on the Graphic Tools ⌐266⌐.
3. Using the mouse, position the pointer within the Graphic Edit window ⌐260⌐ where you want to start drawing one end of the line.
   Click + hold to insert the starting point for the line, then drag the mouse until you have drawn a line of the required length and angle.
4. Release the left mouse button to mark the ending point of the line.

SEE ALSO

Line control set ⌐306⌐
Editing and configuring lines ⌐488⌐
Graphic Tools ⌐266⌐

8.17.1.3.2 Editing and configuring lines

To edit a line, position the pointer within the Graphic Edit window ⌐260⌐ over the cutout, then click to select the clock. Alternatively, use the tools in the Select Graphic toolbox ⌐319⌐ to select the cutout.

The Size and Move ⌐482⌐ edit mode is selected and the Size and Move edit handles appear around the cutout.

- Edit the line as required interactively using the mouse.
- Edit the length, position and width using the Line control set ⌐306⌐ on the Graphic Tools ⌐266⌐.

- Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected line.

8.17.1.4   Rectangles

Regular polygons are drawn using either Graphics> [395] Shapes>Rectangle [400] to draw a rectangle or Graphics> [395] Shapes>Rounded Rectangle [401] or the respective Rectangle and Rounded Rectangle tools in the Shape toolbox [319] on the Graphic Tools [266] toolbar.

Rectangle   Rounded Rectangle

8.17.1.4.1   Drawing rectangles

1. Select Graphics> [395] Shapes>Rectangle [400] to draw a rectangle or Graphics> [395] Shapes>Rounded Rectangle [401]. Alternatively, you can select the Rectangle or Rounded Rectangle tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar.
2. Using the mouse position the pointer within the Graphic Edit window [260] where you want to start drawing one corner of the rectangle.
3. Click + hold, then drag the mouse until you have drawn a rectangle of the required size and shape.
4. Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

Rectangle control set [309]
Rounded Rectangle control set [310]
Graphic Tools [266]

8.17.1.4.2   Editing and configuring rectangles

To edit a rectangle or rounded rectangle, position the pointer within the Graphic Edit window [260] over the shape, then click to select the rectangle. Alternatively, use the tools in the Select Graphic toolbox [319] to select the rectangle.

The Size and Move [482] edit mode is selected and the Size and Move edit handles appear around the rectangle.

- Edit the rectangle as required interactively using the mouse.
- For rectangles, edit the position, width and height using the Rectangle control set [309] on the Graphic Tools [266].
- For rounded rectangles, edit the position, width, height, rounded corner curve and skew settings using the Rounded Rectangle control set [310] on the Graphic Tools [266].
- Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected line.

8.17.1.5   Regular polygons

Regular polygons are drawn using either Graphics> [395] Shapes>Regular Polygon [402] or the Regular Polygon tool in the Shape toolbox [319] on the Graphic Tools [266] toolbar.

3 sides   4 sides   5 sides   10 sides
(triangle)   (diamond)   (pentagon)   (decagon)

8.17.1.5.1 Drawing regular polygons

1. Select <u>Graphics></u> |395| <u>Shapes>Regular Polygon</u> |402| to draw a rectangle. Alternatively, you can select the Regular Polygon tool from the <u>Shape toolbox</u> |319| on the <u>Graphic Tools</u> |266| toolbar.
2. Using the mouse position the pointer within the <u>Graphic Edit window</u> |266| where you want to start drawing the centre of the regular polygon.
3. Click + hold, then drag the mouse away from the centre point until you have drawn a regular polygon of the required size.
4. Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

<u>Regular Polygon control set</u> |309|
<u>Editing and configuring regular polygons</u> |490|
<u>Graphic Tools</u> |266|

8.17.1.5.2 Editing and configuring regular polygons

To edit a regular polygon, position the pointer within the <u>Graphic Edit window</u> |266| over the polygon, then click to select the polygon. Alternatively, use the tools in the <u>Select Graphic toolbox</u> |319| to select the polygon.

The <u>Size and Move</u> |482| edit mode is selected and the Size and Move edit handles appear around the polygon.

- Edit the regular polygon as required interactively using the mouse.
- Edit the position, radius and numbers of sides using the <u>Regular Polygon control set</u> |309| on the <u>Graphic Tools</u> |266|.
- Use the other available <u>control tabs</u> |266| on the Graphic Tools to configure other settings for the selected line.

8.17.1.6 Splines and polygons

Splines and polygons are drawn using the respective commands in the <u>Graphics></u> |395| Shapes> menu or the Spline and Polygon tools in the <u>Shape toolbox</u> |319| on the <u>Graphic Tools</u> |266| toolbar.
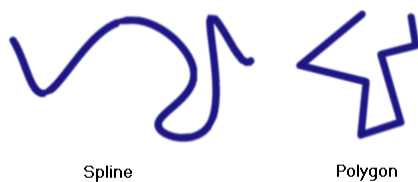
Spline   Polygon

Once a spline is drawn, its <u>type</u> |491| and <u>mode</u> |491| can be selected. One a polygon is drawn, its <u>mode</u> |491| can be selected.

8.17.1.6.1 Spline and polygon anatomy

When editing splines and polygons, they consist of the following parts:

8.17.1.6.2 Spline types

The following spline types are available from the Graphics>Spline Type 395 menu or from the Spline control set 311 on the Graphic Tools 266. They all produce curved edges in different ways:

Menu Command	Description	
Graphics> 395 Spline Type>Cubic 407	A cubic spline curve passes through the vertex control points.	
Graphics> 395 Spline Type>Beta 407	A beta spline produces a smoother curve.	
Graphics> 395 Spline Type>Bezier 407	A bezier spline does not pass through the vertex control points and is only useful for small numbers of points.	

8.17.1.6.3 Spline and polygon modes

There are three modes available for selection when drawing polygons and splines (two for text splines); open, closed and filled (unavailable when editing text splines). The following modes are available from the Spline control set 311 on the Graphic Tools 266:

Menu Command	Description	Available with Text Spline
Graphics> 395 Fill Mode>Open 406	Create an unjoined spline, polyline or text spline	■
Graphics> 395 Fill Mode>Closed 407	Create a closed spline, polyline or text spline	■
Graphics> 395 Fill Mode>Filled 407	Create a filled spline or polyline	

8.17.1.6.4 Drawing splines

1. Select Graphics> 395 Shapes>Spline 402 to draw a spline. Alternatively, you can select the Spline tool from the Shape toolbox 319 on the Graphic Tools 266 toolbar.
2. Select the spline type 491 from the Graphics>Spline Type 395 menu or from the Spline control set 311 on the Graphic Tools 266.
3. Select the spline mode 491 from the Graphics>Fill Mode 395 menu or from the Spline control set 311 on the Graphic Tools 266.
4. Using the mouse, position the pointer within the Graphic Edit window 266 where you want to start drawing first vertex point of the spline. Click to insert the first vertex point. Drag the mouse away from the first vertex point to extend the polyline. Click again to insert the second vertex point. Repeat this process until you have drawn a spline of the required size and shape.
5. Click twice to finish drawing.

SEE ALSO

Spline control set 311
Editing and configuring splines and polygons 492
Spline types 491
Graphic Tools 266

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

8.17.1.6.5   Drawing polygons

1. Select Graphics> [395] Shapes>Polygon [402] to draw a polygon. Alternatively, you can select the Polygon tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar.
2. Select the polygon mode [491] from the Graphics>Fill Mode [395] menu or from the Polygon control set [308] on the Graphic Tools [266].
3. Using the mouse, position the pointer within the Graphic Edit window [266] where you want to start drawing first vertex point of the polygon. Click to insert the first vertex point. Drag the mouse away from the first vertex point to extend the polyline. Click again to insert the second vertex point. Repeat this process until you have drawn a spline of the required size and shape.
4. Click twice to finish drawing.

SEE ALSO

Polygon control set [308]
Editing and configuring splines and polygons [492]
Graphic Tools [266]

8.17.1.6.6   Editing and configuring splines and polygons

To edit a spline or polygon, position the pointer within the Graphic Edit window [266] over the shape, then click to select the spline or polygon. Alternatively, use the tools in the Select Graphic toolbox [319] to select the spline or polygon.

The Size and Move [482] edit mode is selected and the Size and Move edit handles appear around the spline or polygon.

*   Edit the spline or polygon as required interactively using the mouse.
*   For splines, edit the position, width and height, thickness, fill type and spline type using the Spline control set [311] on the Graphic Tools [266].
*   For polygons, edit the position, width and height, thickness and fill type using the Polygon control set [308] on the Graphic Tools [266].
*   Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected line.

8.17.1.7   Stars

Stars are drawn using either Graphics> [395] Shapes>Star [401] or the Star tool in the Shape toolbox [319] on the Graphic Tools [266] toolbar.

8. Learn more about

Graphic elements

8.17.1.7.1   Drawing stars

1. Select Graphics> [395] Shapes>Star [401] to draw a rectangle. Alternatively, you can select the Star tool from the Shape toolbox [319] on the Graphic Tools [266] toolbar.
2. Using the mouse, position the pointer within the Graphic Edit window [260] where you want to start drawing the centre of the star.
3. Click + hold, then drag the mouse away from the centre point until you have drawn a star of the required radius and shape.
   By default, a star will have 5 points. When defining the radius and shape of a star, the following conventions are used:
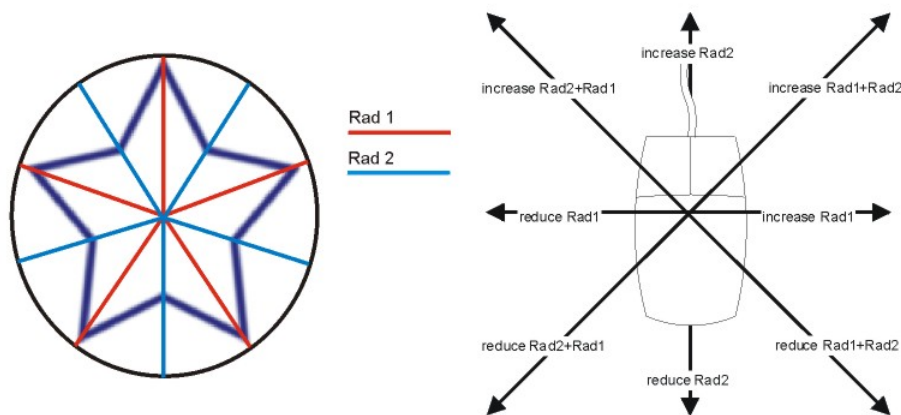
     The conventions listed are reversed once the selected star's point of origin is crossed (into negative x and y values)

4. Release the left mouse button or lift the pen from the tablet to finish drawing.

SEE ALSO

Star control set [312]
Editing and configuring stars [493]
Graphic Tools [266]

8.17.1.7.2   Editing and configuring stars

To edit a star, position the pointer within the Graphic Edit window [260] over the star, then click to select the star. Alternatively, use the tools in the Select Graphic toolbox [319] to select the star.

The Size and Move [482] edit mode is selected and the Size and Move edit handles appear around the star.

- Edit the star as required interactively using the mouse.
- Edit the position, radius and numbers of sides using the Star control set [312] on the Graphic Tools [266].
- Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected line.

8.17.1.8   Completing shape and cutout edting

To complete the editing of the selected shape and stick it down onto the foreground layer, do one of the following:

- select Graphics> [395] Stop Editing [400];
- press the ESC key on the keyboard.

All the adjustments made during editing appear immediately, giving instant feedback of the shapes appearance. The shape will be fully filtered (anti aliased) when it is stuck down.

8.17.2 Clocks

8.17.2.1 Inserting clocks

To add a clock to the current page, ensure the foreground layer is selected on the current page and follow the steps below:

1. Select either Graphics> [395] Clocks>Date Clock [403] or Graphics> [395] Clocks>Digital Clock [403]. Alternatively, you can select the Date Clock or Digital Clock tool from the Clocks toolbox [317] on the Graphic Tools [266] toolbar.
2. Using the mouse, position the pointer within the Graphics Edit window where you want to place the clock, then click to insert the clock onto the page.

8.17.2.2 Editing and configuring clocks

To edit a clock, position the pointer within the Graphic Edit window over the clock, then click to select the clock. Alternatively, use the tools in the Select Graphic toolbox [319] to select the clock.

The Size and Move edit mode is selected and the Size and Move edit handles appear around the clock.

*   Edit the clock as required interactively using the mouse.
*   Edit the font, height, width, character spacing, italic shear and position using the Text Line/Clock control set [312] on the Graphic Tools [266].
*   Use either the Date Clock Settings control tab [279] or Digital Clock Settings control tab [280] to configure appearance, type and trigger settings for the selected clock.
*   Use the other available control tabs [266] on the Graphic Tools to configure other settings for the selected clock.

8.17.2.3 Date clocks

Date clocks are drawn using the Date Clock tool in the Clock toolbox [317] on the Graphic Tools [266] toolbar.

Monday 10th January 2005
10th January 05
10/01/05

8.17.2.3.1 Date clock types

There are two types of date clock.

Internal

The internal date clock always displays the Clarity system unit or Collette PC system clock time.

RS232

An RS232 date clock takes its timing information from an RS232 port, enabling an external timing device to transmit accurate timing to the Clarity system unit or Collette PC. The date itself can be displayed in various formats and the field separator character can be chosen. More than one clock can be used simultaneously; the update rate is dependent on the character size and style employed.

8.17.2.3.2 Editing the names of weekdays, months and ordinal suffixes

The CG Tools software defaults to using full English names for weekdays, months and ordinal suffixes (i.e. 1st, 2nd, etc.), but if these need to be edited to a shorter form or to use a different language then a text file called 'DATES.CLK' must be created in the root folder where the software is installed.

The file must contain, in order, the names of all the days of the week (with Sunday being first), the names of all months

(with January first) and finally the suffixes to all numbers 1-31. Each name must start on a new line and the names must come in this order, but empty lines and comments (lines starting with #) can be used.

An example file is shown below:

```
#Weekdays
Sun
Mon
.
.
Sat
#Month names
Jan
Feb
.
.
Dec
#Suffixes 1-31
st
nd
rd
.
.
st
```

8.17.2.4   Digital clocks

Digital clocks are drawn using the Digital Clock tool in the Clock toolbox [317] on the Graphic Tools [266] toolbar.

8.17.2.4.1   Digital clock types

There are four types of digital clock. Digital clocks can be preset with any time (except Internal) and can count up or down. More than one clock can be used simultaneously; the update rate is dependent on the character size and style employed. For a 1/10th second update, a maximum height of around 150 lines can be used, but if fields are being clocked, this maximum is reduced to about 40 lines.

Internal

An internal digital clock always displays the Clarity system unit or Collette PC system clock time.

Slave to timecode

A slave to timecode clock displays the time from a selected timecode source.

Stopwatch

A stopwatch digital clock functions like a hand-held stopwatch, with start/stop and reset/lap time controls. The controls can be assigned to any key on the keyboard, with simultaneous control of all stopwatch clocks using the Take and Pause keys.

Global stopwatch

A global stopwatch digital clock works in the same way as a stopwatch, but it allows timing to be maintained even when there are no clocks being played out online. A normal stopwatch only maintains its timing whilst the page containing the stopwatch is being played out. A global stopwatch will maintain its timing between pages and even while Offline.

8.17.2.4.2   Adjusting the preset value of a digital clock

If the digital clock type is set as Stopwatch, Global Stopwatch or RS232, you can set the clocks' preset value before playout.

1.   Select the clock if it is not already selected.
2.   Make sure that you are in Text edit mode.
3.   Use the numeric and cursor keys to enter the required preset value. Pressing the Del key will reset the preset value to 0.

8.17.2.4.3   Controlling digital stopwatches whilst online

To control digital stopwatch triggering whilst online:

*   Press the Take key to start or stop all clocks which have the Take/Pause trigger enabled.
*   Press the Pause key to give a lap time for all running clocks which have the Take/Pause trigger
*   enabled. Clocks which are stopped will be reset to the initial value when the Pause key is pressed.
*   Press the assigned Start key to start or stop an individual clock.
*   Press the assigned Reset key to lap time or reset an individual clock.
*   Unless a clock is enabled using the Auto Run check box, terminate the page containing the clocks by pressing the Undo or Online keys.

Multi-page global stopwatches are controlled in a slightly different way because their control keys are checked while the system is waiting to perform the next page transition. This means that the Take/Pause
trigger setting cannot be used for multi-page stopwatches and start and stop keys must be defined. Multi-page stopwatches can be used on pages with rolls, crawls, etc. and Cool Moves as well as on normal
static pages, but only the cut page transition should be used between pages.

8.17.2.5   Completing clock editing

To complete the editing of the selected clock and stick it down onto the foreground layer, do one of the following:

*   select Graphics> ⌐395⌐Stop Editing ⌐400⌐ from the Graphics menu;
*   press the ESC key on the RapidAction keyboard.

All the adjustments made during editing appear immediately, giving instant feedback of the clocks' appearance. The clock will be fully filtered (anti-aliased) when it is stuck down.

For digital clocks, the value displayed will be the preset value for a Stopwatch, Global Stopwatch or RS232 digital clock and the current time (when the last edit change was made) for an Internal digital clock.

For date clocks, the date displayed during editing will always be the current system date for both Internal and RS232 date clocks.

8.17.3   Cel animations, video clips and live video objects

8.17.3.1   Live video obejcts

Live video objects are inserted using either <u>Graphics></u> [395] <u>Shapes>Cels/Video>Paste Live</u> [404] or the Paste Live tool in the <u>Cel and Clip toolbox</u> [317] on the <u>Graphic Tools</u> [266] toolbar.
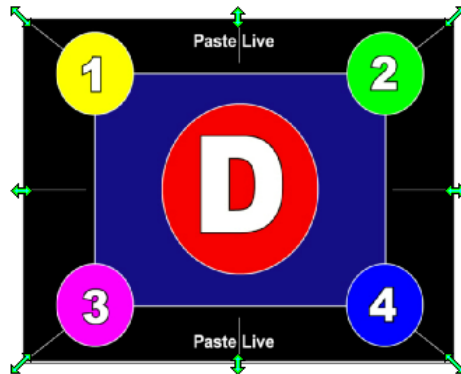
Apart from display live video in a static position, one of the primary uses of live video objects is the creation of squeezeback effects.

Squeezeback is the term used to describe the following process:

a)   the static display of a fully filtered resized incoming live video object at SD resolution with other foreground/background components;

b)   the subsequent resizing of the live video object between full-screen and the required position/size, thus enabling the display of captions and rolls/crawls in a separate area alongside the program picture.

SEE ALSO

<u>Inserting a live video object into a page foreground</u> [497]

8.17.3.1.1   Inserting a live video object into a page foreground

To insert a pasted live video object onto the current page within the <u>Graphic Edit window</u> [266], follow the steps below:

1. Select <u>Graphics></u> [395] <u>Shapes>Cels/Video>Paste Live</u> [404]. Alternatively, you can select the Paste Live tool in the <u>Cel and Clip toolbox</u> [317] on the <u>Graphic Tools</u> [266] toolbar.
2. Position the pointer within the Graphic Edit window where you want to position the pasted live video object.
3. Click + hold, then drag the mouse to mark out the area in which you want to paste the live video object.
   The live video object is pasted down of the foreground of the current page, within the marked area.
4. Use the <u>control tabs</u> [266] on the <u>Graphic Tools</u> [266] to edit graphic colours and properties.
5. Configure the paste live object using the <u>Paste Live control set</u> [307]. Cropping settings can be configured using the <u>Crop control tab</u> [278].

8.17.3.2   Video clips [CLARITY]

Video clips are inserted using either <u>Graphics></u> [395] <u>Shapes>Cels/Video>Paste Clip</u> [405] or the Paste Live tool in the <u>Cel and Clip toolbox</u> [317] on the <u>Graphic Tools</u> [266] toolbar.

Video clips that are referenced but cannot be found display the missing clip place holder, showing the path on the clip volume from where the clip was inserted.

Video Clip
"rtlclips/525 Demo/bgd_blue3"
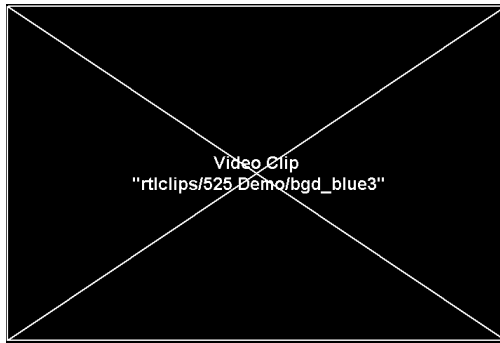
Apart from displaying clips in a static position, one of the primary uses of video clips is the creation of squeezeback effects.

Squeezeback is the term used to describe the following process:

a) the static display of a fully filtered resized incoming live video object at SD resolution with other foreground/background components;

b) the subsequent resizing of the video clip object between full-screen and the required position/size, thus enabling the display of captions and rolls/crawls in a separate area alongside the program picture.

SEE ALSO

Inserting a video clip into a page foreground ^{498}

8.17.3.2.1   Inserting a video clip into a page foreground

To insert a video clip onto the current page within the Graphic Edit window ^{260}, follow the steps below:

1. Select Graphics> ^{395} Shapes>Cels/Video>Paste Clip ^{405}. Alternatively, you can select the Paste Clip tool in the Cel and Clip toolbox ^{317} on the Graphic Tools ^{266} toolbar.
    The Clarity Explorer ^{362} is displayed.
2   Select the desired clip drive and folder, then the select the desired clip.
3   Select OK to close the Clarity Explorer and insert the clip into the paste buffer.
4. Position the pointer within the Graphic Edit window where you want to position the clip.
5. Click + hold, then drag the mouse to mark out the area in which you want to paste the clip.
    The clip is pasted down of the foreground of the current page, within the marked area.
6. Use the control tabs ^{266} on the Graphic Tools ^{266} to edit graphic colours and properties.
7. Configure the clip using the Clip Settings control tab ^{276}. Cropping settings can be configured using the Crop control tab ^{278}.

8.18   Graphic planes and shading types

There are seven available shading types ^{499} that can be applied to any of the three available graphic planes ^{498} (Foreground, Edge or Shadow) for a selected graphic element.

8.18.1   Graphic planes

The graphic plane that you are editing for a selected graphic element is selected using the Graphic Plane radio buttons on the Colour control tab ^{277} on the Graphic Tools ^{266}. There are three available graphics planes for every graphic element. The appearance of any of the three graphic planes is dependant on the edge effect ^{470} that you have selected for the current graphic element.
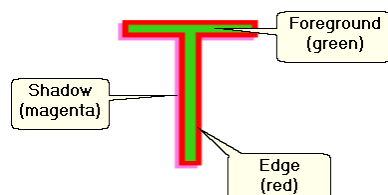
Shading settings for graphic planes can be edited interactively using special editing handles featured with the Line Shading |480|, Point Shading |481| and Texture Map Offset |483| graphic edit modes (if those shading types |499| are selected).

Graphic plane	Description
Foreground	The foreground part of the graphic element.
Edge	The edge part of the graphic element.
Shadow	The shadow part of the graphic element.

8.18.2   Shading types

The shading type for a selected graphic plane is defined using the Shading Type drop-down list box on the Colour control tab |277| on the Graphic Tools |266|. If a graphic plane has transparency applied to it, a shading type can defined for the transparency using the Shading Type drop-down list box on the Transparency control tab |295| on the Graphic Tools |266|.

Main and secondary colours (used by the Vertical, Horizontal, Point and Line shading types) for the selected graphic plane are defined using either the Main and Secondary colour selection boxes on the Colour control tab |277| on the Graphic Tools |266| or the six colour selection boxes on the <edge effect><foreground/edge/shadow colour selector> |302| static control area.

The seven available shading types are described in the table below. Each example shows the selected shading type applied to the foreground graphic plane |498| of a text line element.

Shading type	Description	Example
No Shading (Previously Solid)	No shading is used; the selected solid colour is used to shade the selected graphic plane.	
Vertical	Graduated vertical shading from the defined main colour through to the defined secondary colour.	
Horizontal	Graduated horizontal shading from the defined main colour through to the defined secondary colour.	
Point	Graduated shading from the defined main colour through to the defined secondary colour, spread out from the centre to the edge of the selected graphic plane. Point shading parameters can be changed using the interactive Point Shading graphic edit mode |481|.	
Line	Graduated vertical shading from the defined main colour through to the defined secondary colour, meeting in the middle giving the effect of a bevelled or raised line. Line shading parameters can be changed using the interactive Line Shading graphic edit mode |480|.	

Shading type	Description	Example
Texture	A bitmap is repeated and mirrored to fill the selected graphic plane. A texture is defined for the selected graphic plane using the [Texture control tab] 294 on the Graphic Tools.	
Texture Map	A bitmap is repeated and mirrored to fill the selected graphic plane. A texture is defined for the selected graphic plane using the [Texture control tab] 294 on the Graphic Tools. Additionally, the bitmaps can be offset. Offsets are defined using the Texture Map offset group box on the [Texture control tab] 294 or by using the interactive [Texture Map Offset graphic edit mode] 483.	

8.19 Image sequence file naming conventions

After selecting to load or save an image sequence file type that results in the creation/searching of a sequence of files (Collage Image files, .PPI, .BMP, .TGA, .TIFF, .JPG, .RPF etc.) , the first filename sets the precedent for the subsequent naming/searching of files that follow in the image sequence.

The conventions are shown below:

Type	Convention of filename entered or selected	First file saved (applies only when saving)	Naming/search criteria of subsequent files in sequence
A	n.xxx	n.xxx	n+1.xxx, n+2.xxx
	6.tif	6.tif	7.tif, 8.tif
B	nnnnnnnn.xxx	nnnnnnnn.xxx	nnnnnnnn+1.xxx, nnnnnnnn+2.xxx
	00000004.tif	00000004.tif	00000005.tif, 00000006.tif
C	aaaab.xxx	aaaabn.xxx	aaaabn+1.xxx, aaaabn+2.xxx
	FileA.tif	FileA0.tif	FileA1.tif, FileA2.tif
D	aaaabn.xxx	aaaabn.xxx	aaaabn+1.xxx, aaaabn+2.xxx
	FileA3.tif	FileA3.tif	FileA4.tif, FileA5.tif
E	aaaabnnn.xxx	aaaabnnn.xxx	aaaabnnn+1.xxx, aaaabnnn+2.xxx
	FileA001.tif	FileA001.tif	FileA002.tif, FileA002.tif

8.20 Jobs

A sequence of one or more pages can be stored and recalled from as a job. The name of the currently loaded job is shown in the application title bar. If you are working on a new unsaved job, Job (n) is displayed until the new job is saved.

8.20.1 Job types

There are three job types available:

Type	Description
[Normal] 501	All pages are stored in a single file.
[Multiple] 501	A header file linking to single pages.
[Single] 502	A single page.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   500

Copyright © 2000-2006 Pixel Power Ltd.

8.20.1.1   Normal

All pages are stored in a single file. The job file includes the description of the background (shading or picture name), a list of the foreground elements (type, colour, position etc.) and the transition and foreground motion for each page. Associated files are referenced from the job.
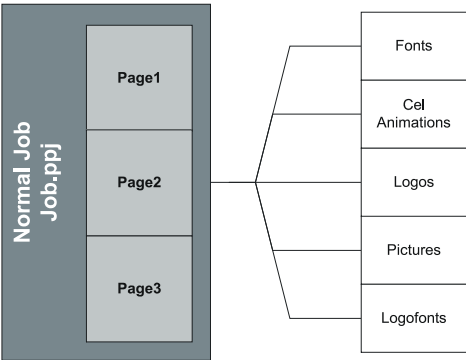
8.20.1.2   Multiple

A multiple page job behaves in a similar way to normal jobs, but can allow for more flexibility in certain circumstances such as:

Off-line editing situations	If the graphics area and transmission Clarity system units each have the same multiple page job, when the graphics area needs to modify just one of these pages, they are then able to download just the single modified page to the transmission unit. This has a considerable time saving compared with downloading the entire job.
Live-to-air editing situations	If two system units are connected over an ethernet network, one unit can be playing out a page sequence whilst the other is editing text, graphics, logos etc. on a page from within that same page sequence. The editing unit could be a Clarity PREP system, Newsroom automation system or other customised PC software.

A multiple page job comprises two parts:

- a header for the job which stores the overall details such as the current palette, grid settings, cache and anything else belonging to the project that is not stored on a per-page basis. The operator may give this header any name, as with a normal job. However, the separate page files must remain in the same directory and on the same drive as their associated header.
- a separate file per page which stores details such as foreground display elements, background image or colour, foreground scroll motion and transition type. These files are created automatically and are named PGnnnnn, where nnnnn is the page number. The operator may not edit the names of these page files.

An important implication of these requirements is that it is impossible to have more than one single page job in the same directory, as there would be no way for the software to distinguish which page files belonged to which job.
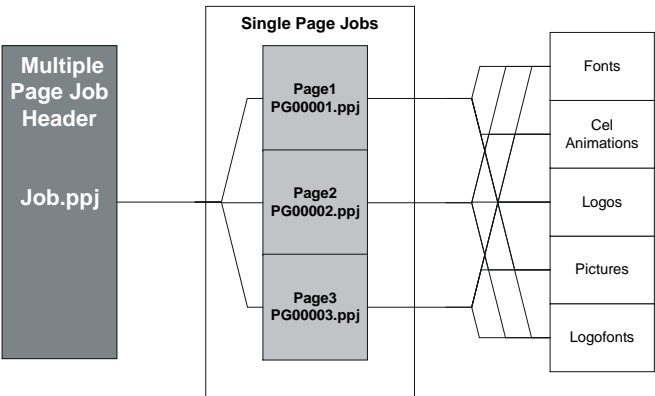
8.20.1.3   Single

A single page job is a single page which, when saved with the correct naming convention, can be merged when a multiple page job is loaded.

8.20.2   Job operating formats

The following job operating formats available:

Type	Description
Clarity 502	Use ONLY with Clarity or Clarity PREP software.

8.20.2.1   Clarity

Jobs saved in this format are saved with the .PPJ file extension, permitting their use ONLY with Clarity or Clarity PREP software.

8.20.3   Copying native .PPJ file examples

8.20.3.1   Copy Job_a.ppj from Machine A to Machine B using Machine A
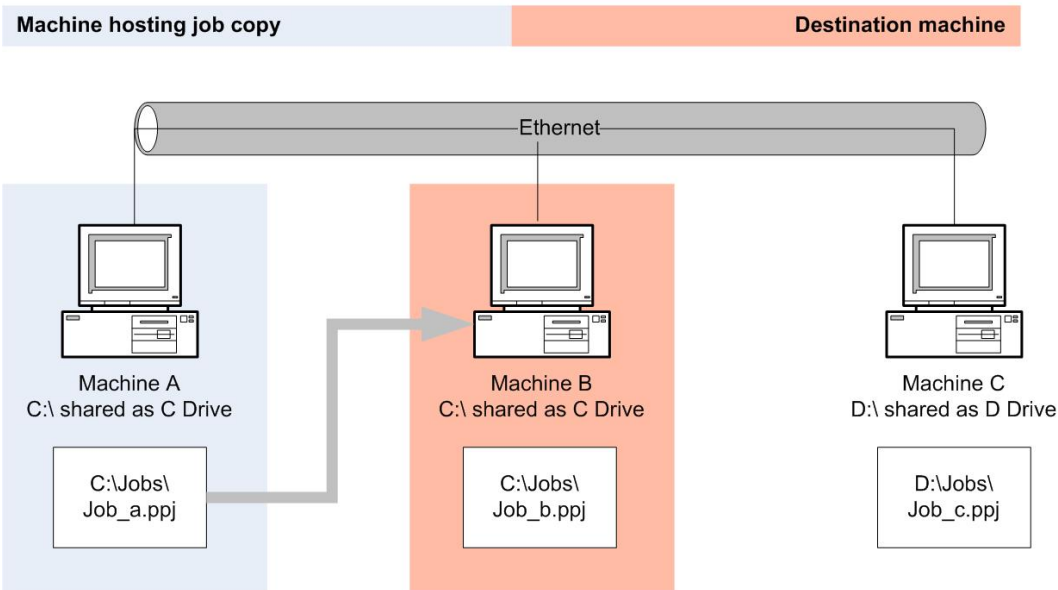
Source 611	Local
Job Path 611	C:\Jobs\Job_a.ppj
Destination 610	Remote
Job Path 609	//Machine B/C Drive/Jobs/Job_a.ppj
Drive Path 609	//Machine B/C Drive/
Use As 610	C:/

8.20.3.2   Copy Job_b.ppj from Machine B to Machine A using Machine A
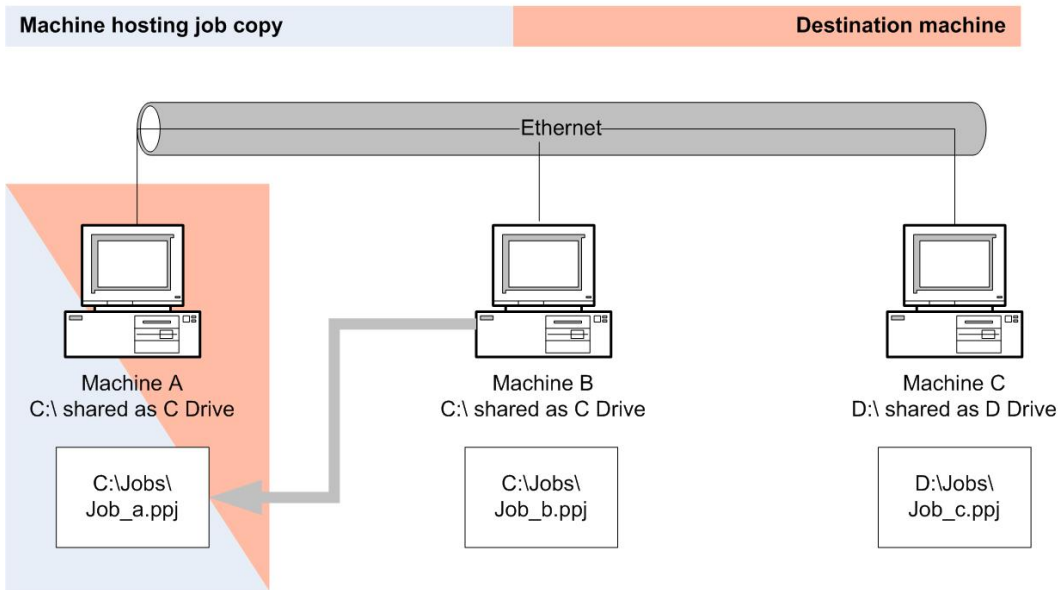
Source [611]	`Remote`
Job Path [611]	`//Machine B/C Drive/Jobs/Job_b.ppj`
Drive Path [610]	`//Machine B/C Drive/`
Use As [611]	`C:/`
Destination [610]	`Local`
Job Path [609]	`C:\Jobs\Job_b.ppj`

8.20.3.3   Copy Job_c.ppj from Machine C to Machine B using Machine A

| Machine hosting job copy | | Destination machine |

Ethernet

Machine A
C:\ shared as C Drive

C:\Jobs\
Job_a.ppj

Machine B
C:\ shared as C Drive

C:\Jobs\
Job_b.ppj

Machine C
D:\ shared as D Drive

D:\Jobs\
Job_c.ppj
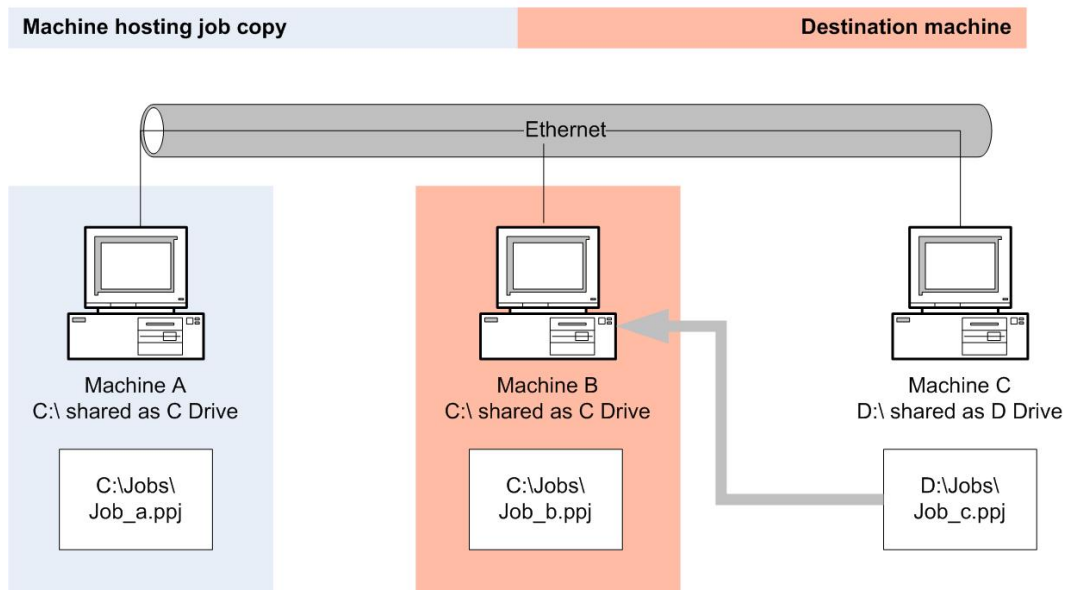
Source 611	Remote
Job Path 611	//Machine C/D Drive/Jobs/Job_c.ppj
Drive Path 610	//Machine C/D Drive/
Use As 611	D:/
Destination 610	Remote
Job Path 609	//Machine B/C Drive/Jobs/Job_c.ppj
Drive Path 609	//Machine B/C Drive/
Use As 610	C:/

8.21   Language support

8.21.1   Arabic

8.21.1.1   Configuring Microsoft® Windows® 2000 and CG Tools for Arabic text entry

Using the Regional Options dialog box (Start>Control Panel>Regional Options), you can choose from a large number of input locales. When you switch to another input locale, some programs offer special features, such as font characters or spell checkers designed for different languages.

If you work in more than one language or communicate with speakers of other languages, you might want to install additional language groups. Each language group you install allows you to type and read documents composed in languages of that group, such as Western Europe and U.S., Central Europe, Baltic, and more. Each language has a default keyboard layout, but many languages have alternate layouts. Even if you work mainly with one language, you may want to try other layouts. In English, for example, typing letters with accents might be simpler with the U.S.-International layout.

SEE ALSO

Microsoft® Windows® 2000 Arabic language configuration 505
Testing system and CG Tools software language configuration 505

8.21.1.1.1 Microsoft® Windows® 2000 Arabic language configuration

Must be logged in as ADMINISTRATOR.

Depending on what additional components were installed with the Microsoft® Windows® 2000 operating system on the current system, you may be asked to insert the Windows 2000 installation CD-ROM during this procedure.

To configure Microsoft Windows 2000 to operate in Arabic, follow the steps below:

1. Select Start>Control Panel>Regional Options. The Regional Options dialog box is displayed.
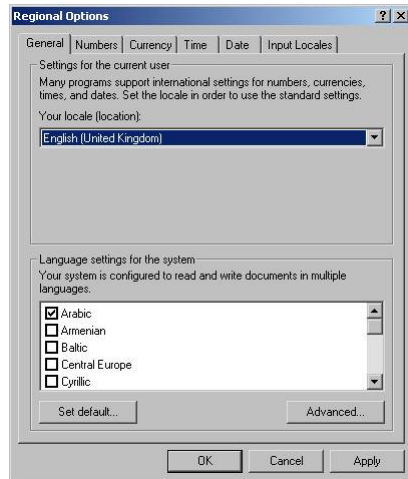
2. Check the Arabic box in the Language setting for system list box.
3. Select the desired Arabic (subtype) language e.g. Arabic (Egypt) from the Your locale (location) drop-down list box.
4. Select Set Default. The Select System Locale dialog box is displayed.

5. Select the desired Arabic (subtype) language e.g. Arabic (Egypt) from the Select the appropriate locale drop-down list box.
6. Select OK to return to the Regional Options dialog box.
7. Select OK to close the Regional Options dialog box. If required, insert the Microsoft Windows 2000 CD-ROM and install the required files. A message may be displayed stating that the files already exist. Click Yes to use the files that are already installed.
8. Select OK.
9. Re-start the system.

8.21.1.1.2 Test system and CG Tools software language configuration

Must be logged in as ADMINISTRATOR.

1. Start the desired CG Tools software product (e.g Clarity or Clarity PREP).
2. Open page 1 in the Graphic Edit window 260. A text page should be created by default; if not, select Text> 408 Text Page 410.
3. Switch to the desired Arabic (subtype) locale e.g. Arabic (EYGPT) - Arabic 101 locale using ALT+SHIFT. This is shown by the locale identifier in the bottom right of the Windows task bar e.g. AR. For local Arabic input, this has to be done every time after you have started the desired CG Tools software product.
4 Select Options> 429 Language>Arabic Windows 433. The Arabic toolbar 249 appears.
5. Close the job (File> 378 Close 381).
6. Create a new job (File> 378 New Job 379) and open page 1 in the Graphic Edit window 260 to test the right-to-left

typing direction.
7. Select an Arabic capable font (i.e major Windows font e.g. Arial or Times New Roman).
8. Type some text within the text page.

8.21.1.2   Configuring Microsoft® Windows® XP and CG Tools for Arabic text entry

Using the Regional and Language Options dialog box (Start>Control Panel>Regional and Language Options) you can choose from a large number of input languages and text services, such as different keyboard layouts, Input Method Editors, and speech and handwriting recognition programs. When you switch to another input language, some programs offer special features, such as font characters or spelling checkers designed for different languages.

By default, products in the Windows .NET Server family install the files for most input languages supported by Windows. However, if you want to enter or display text in the East Asian languages (Chinese, Japanese, or Korean) or the complex script and right-to-left languages (Arabic, Armenian, Georgian, Hebrew, the India languages, Thai, or Vietnamese), you can install the language files from the Windows CD-ROM or, if applicable, a network. Each language has a default keyboard layout, but many languages have alternate versions. Even if you do most of your work in one language, you might want to try other layouts. In English, for example, typing letters with accents might be simpler with the U.S.-International layout.

For more information on languages in Microsoft® Windows® XP, see
http://www.microsoft.com/windowsxp/using/setup/expert/honeycutt_03april28.mspx.

SEE ALSO

Microsoft® Windows® XP Arabic language configuration 506
Testing system and CG Tools software language configuration 508

8.21.1.2.1   Microsoft® Windows® XP Arabic language configuration

Must be logged in as ADMINISTRATOR.

Depending on what additional components were installed with the Microsoft® Windows® XP operating system on the current system, you may be asked to insert the Windows XP installation CD-ROM during this procedure.

To configure Microsoft Windows XP to operate in Arabic, follow the steps below:

1. Select Start>Control Panel>Regional and Language Options. The Regional and Language Options dialog box is displayed.

8. Learn more about

Language support
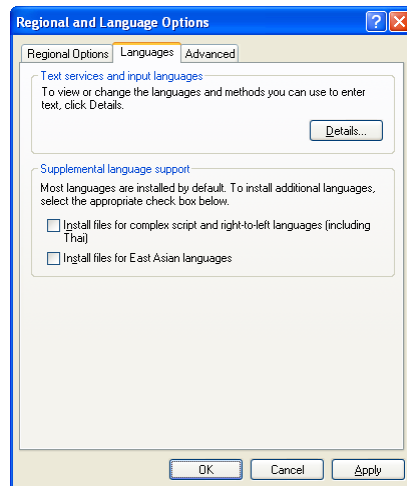
2. On the Languages dialog tab, check the Install files for complex script and right-to-left languages box in the Supplemental language support group box.
A message is displayed informing you that you have chosen to install Arabic language files and this will require at least 10Mb of free space. Ensure that this is the case before continuing.
3. Select OK to close the Regional and Language Options dialog box.
4. If required, insert the Microsoft Windows XP CD-ROM and install the required files. A message may be displayed stating that the files already exist. Select Yes to use the files that are already installed.
5. Select OK.
6. Re-start the system.
7. After the system has re-started, select Start>Control Panel>Regional and Language Options. The Regional and Language Options dialog box is displayed.
8. On the Languages dialog tab, select Details in the Text services and input languages group box. The Text Services and Input Languages dialog box is displayed.

9. Select Add to display the Add input language dialog box.
10. Select the Arabic (subtype) language e.g. Arabic (Egypt) from the Input Language drop-down list box.
11. Select the desired Keyboard/IME (Input Method Editor) e.g Arabic 101 from the Keyboard layout/IME drop-down list box.
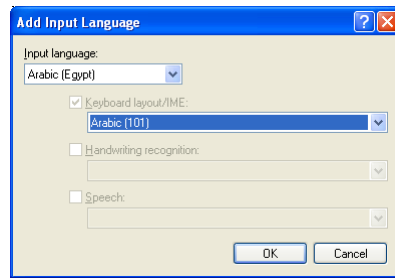
12. Select OK to return to the Text Services and Input Languages dialog box.

Notice that Arabic has been added to the Installed Services list box (blue shaded area).

See Test system and CG Tools software language configuration [508] for the next steps.

8.21.1.2.2   Testing system and CG Tools software language configuration

Must be logged in as ADMINISTRATOR.

1. Start the desired CG Tools software product (e.g Clarity or Clarity PREP).
2. Open page 1 in the Graphic Edit window [260]. A text page should be created by default; if not, select Text> [408] Text Page [410].
3. Switch to the desired Arabic (subtype) locale e.g. Arabic (EYGPT) - Arabic 101 locale using ALT+SHIFT. This is shown by the locale identifier in the bottom right of the Windows task bar e.g. AR. For local Arabic input, this has to be done every time after you have started the desired CG Tools software product.
4. Select Options> [429] Language>Arabic Windows [433]. The Arabic toolbar [249] appears.
5. Close the job (File> [378] Close [381]).
6. Create a new job (File> [378] New Job [379]) and open page 1 in the Graphic Edit window [260] to test the right-to-left typing direction.
7. Select an Arabic capable font (i.e major Windows font e.g. Arial or Times New Roman).
8. Type some text within the text page.

8.22 Live surface animations using Autodesk® 3ds Max® .RPF files

Clarity can play out complex 3D/2D animations that combine the power and flexibility of dedicated 3D modelling software with the convenience of real-time character and animation rendering, using content provided in real-time e.g. by controlling automation systems.

> **An online tutorial for this topic can be downloaded using the following link:**
>
> **http://www.pixelpower.com/content/downloads/files/Clarity Tutorials/Online_Tutorial_3D_Cel.htm**
>
> Tutorials are in Macromedia® Shockwave Flash format and require the Macromedia Shockwave Player to be installed (this will download automatically if not installed on your system). Tutorial will open in a new window and may take some time to download depending on connection speed.

Animations or static objects are pre-rendered using Autodesk® 3ds Max®, and compiled into Clarity cels (.CEL file format). When these cels are played out, Clarity can project its own graphic objects (such as text and/or animations) in real-time onto the surfaces of the pre-rendered 3D objects. If the Clarity projected graphic objects are themselves animated (e.g. Cool Moves and Smart Moves), then this movement will also be projected onto the 3D object surfaces.

Examples of use include:

- flying text straps on/off in 3D space;
- turning straps around to reveal more information on other faces;
- animated score boards, in which each element can take any path in 3D space;
- projecting text onto non-flat surfaces (e.g. around curves or undulating objects);
- deforming (e.g. bending, twisting, rippling) text straps.

Clarity can also project its graphics onto 'invisible' objects; in which case the cel becomes a transformation template, used purely to perform arbitrary animated 3D transformations on Clarity graphics.

Examples of invisible object use include:

- playing a ticker along a specified 3D curved path in 3D space;
- flying a strap on in 3D, where both the text and the strap body are rendered in real-time by Clarity, allowing the strap's appearance and colour to be selectable at playback time;
- applying an arbitrary 3D space transformation to a Clarity animation.

The following sections detail the steps required to realise such animations. It assumes familiarity with the basic operation of Autodesk® 3ds Max®, including object creation, application of materials, animation and rendering, and also knowledge of the CG Tools version 7.1 user interface.

Terminology 510

SEE ALSO

8.22.1   Terminology

In the following sections, and in the CG Tools user interface, the term Live Surface describes a surface, or part of a surface of a 3D object, onto which Clarity graphics are to be projected at play-out time. A Live Surface Cel is a Clarity cel that has been compiled from data supplied by Autodesk® 3ds Max®, and which contains one or more live surfaces.

8.22.2   Overview of the creation process

The following steps are required when creating live surface animations:

1. Objects are created in Autodesk® 3ds Max® 510 to represent the graphic objects onto which playout data is to be applied.
2. Materials 510 are created as placeholder's for the real-time graphics that will be added by Clarity, and are assigned to the object faces 511 appropriately.
3. Optionally, the objects are animated 512 using the Autodesk® 3ds Max® timeline interface.
4. The completed animation is rendered 512 into an image sequence, which contains extra mapping information for use by Clarity.
5. The image sequence is imported into Clarity as a Live Surface Cel. 512
6. Clarity graphic objects are created and assigned 513 to the live surfaces on which they will play out in real-time.

These stages are now described in more detail.

8.22.3   Creating the 3D objects

Practically any Autodesk® 3ds Max® object type can be used to create the model, the most important consideration being the ease of which materials can be mapped onto the object surfaces. The *Box* and *Chamfer Box* types are the most useful for creating basic text straps etc. If the objects are required to be invisible (i.e. where only the projected Clarity graphics will appear, without the object), this can be specified at the cel compile time, so it does not affect object creation.

NOTES

* Clarity can scale or offset live text etc., that is projected onto live surfaces, but cannot perform rotations, so it is essential that all objects are rotated correctly in the scene before rendering. If plane objects are used, mapping information is only output on one side of the plane, so care should be taken to orientate them correctly.
* It is helpful to give meaningful names to the objects and ensure similar objects are named systematically, as these names will be written to the rendered output file, and will be used by the Clarity user interface to identify live surfaces.

8.22.4   Preparing the live surface materials

For the surface of an object to have Clarity playout graphics projected onto it, it needs to have a material applied to it which has been set up as a live surface material. Multiple live surface materials can be created, and each instance of a live surface material applied to all or part of an object will be seen by Clarity as a separate live surface, to which a separate set of real-time playout graphics can be applied.

There are two requirements when setting up a live surface material; setting the Material Effects Channel 511 and setting a material map 511.

8.22.4.1   Setting the Material Effects Channel

The Material Effects Channel flyout option in the material editor needs to be set to a non-zero value, to indicate to Clarity that the material should be treated as a live surface. Each live surface material should have a different material effects channel, as these are used (in combination with the name of the object(s) that the material is applied to) by the CG Tools user interface to identify the different live surfaces.

8.22.4.2   Setting a material map

It is recommend that to enable easy configuration of the orientation and positioning of the live surface materials, a 'placeholder' bitmap is configured as a Diffuse Colour map for the material. The file `LiveSurfacePlaceHolder.tif` is supplied with Clarity for this purpose, and contains a simple grid of text, surrounded by a coloured border.

With a placeholder map set, when the material is applied and previewed on the face of an object, it will then be obvious as to the orientation of the live data that will be ultimately played on to the surface by Clarity. By setting the Amount value for the placeholder map to zero, it will remain visible in the Autodesk® 3ds Max® editing windows, but will disappear in the final rendered image. Alternatively, if a real diffuse colour map is required, this can replace the placeholder map once the mapping parameters have been configured.

If a placeholder map is not used, it is still a requirement that at least one map is set for the material. This is necessary for Autodesk® 3ds Max® to output the mapping coordinate information required by Clarity.

8.22.5   Applying materials to the objects

It is common for different live surface materials to be applied to separate faces of the same object e.g. a strap could have different data played out on its front and back faces.

The easiest way of configuring the selected faces of an object to receive live Clarity graphics is to create a material for the non-live surfaces of the object (e.g. the back and sides of a text strap), and to apply this material to the whole object. You can then make a copy of this material, in which the live parameters (non-zero Material ID and texture map) are also configured, for the live parts of the object. If necessary, convert the object to an editable mesh, and then select the required live face and apply the live version of the material to just that face.

An alternative method is to create a Multi-Object material which contains the non-live and live materials within it, and then subsequently use Poly Select modifiers to individually select faces of an object, with Material modifiers to specify the Multi-Object ID's to use on the selected faces.

SEE ALSO

8.22.5.1   UV Coordinate manipulation

Once a live material has been applied to object surfaces, the UVW Map and/or UVW Xform modifiers can be applied to the object, or part of the object, to position and orient the live playout data (as represented by the placeholder map). The main requirement in setting up the mapping is that the placeholder image appears in the correct orientation, and that it is not visibly repeated on the surface (as this will cause the Clarity graphics to be repeated).

For some objects that have multiple live surfaces, it will be necessary to apply different UVW Xform modifiers to the different faces, in order to correctly orientate them.

NOTE

When setting up the live surface playout orientation (positioning etc.), all changes should be made via object modifiers, and not by changing parameters inside the Material's placeholder map settings. This is because Clarity uses the mapping (UV Coordinate) information directly from the object, irrespective of the settings of the material applied to it. If real maps (e.g. texture/bump maps) are used on the live surface, these can have their own parameters adjusted within the material editor, without affecting the live playout positioning.

It is essential to make sure that the UV coordinate boundaries do not wrap around within the visible parts of any live surfaces. This can be easily checked by making sure the coloured borders in the placeholder image do not run across the middle of a surface.

The default UV coordinates generated by an object such as a sphere have a discontinuity along a vertical seam, from the bottom to the top of the sphere (this is where the U coordinate finishes at 1 and starts again at 0). When mapping

onto such an object, a continuous region of UV coordinates needs to be visible to the user. This is best achieved by rotating the object so this seam is at the back, rather than by trying to manipulate the UV coordinates using a UV Mapping or UV Transform modifier. This is because when such modifiers are used, the original object seam is still slightly visible within the UV coordinates that are output during rendering, and this can cause artifacts when Clarity projects text across this seam.

8.22.6 Animating the objects

For some applications, it is not necessary to animate the objects e.g. if the graphics that Clarity projects onto the surfaces will be animated themselves by a ticker or Cool Move. In this case, a single rendered frame is sufficient. Otherwise, the objects should be animated as required. They are free to move in any way in relation to each other, and any obscuring of one object with another will be correctly obeyed by the graphics that are ultimately projected onto the object surfaces.

8.22.7 Rendering the animation

Clarity requires that the animation is rendered as a sequence of .RPF image files. When this file type is selected, a number of additional output options are presented, and the following Optional Channels should be selected:

- Material Effects;
- UV Coordinates;
- Node RenderID.

This ensures that Clarity receives the extra data required for live surface projection.

If objects are flying right across the screen, it is often appropriate to set the render size to the full screen area, to include all the movement. This will not significantly waste disk space or playback performance, as both the .RPF file format and the Clarity .CEL format are optimised to store unused areas of the screen efficiently. If field rendering is selected, the Autodesk® 3ds Max® preferences Field Order should typically be set to Odd (lower field first) for NTSC animations, or Even (upper field first) for PAL animations.

To check that the live surface information is being correctly rendered out in the render frame window, if the Material Effects channel is selected, colours should appear on all of the live surface parts of objects; all other parts of the scene should be grey. If the UV Coordinates channel is selected, then the live surfaces should show up as graduated blue/green regions (other non-live objects may show UV coordinates as well). Any discontinuities in these colour gradients within the live surfaces are probably due to the boundaries of the UV coordinates lying within the surfaces, which will prevent correct mapping onto the surfaces by Clarity. See UV Coordinate manipulation [511] for more information.

8.22.8 Compiling the CG Tools cel animation

The Clarity cel should be created using the standard cel compilation techniques using Graphics> [395] Cels / Video>Create Cel Animation [404]. After selecting an .RPF image sequence using the Create Cel Animation From Picture dialog box [620], configure cel compilation attributes using the Cel Creation control tab [271] on the Graphic Tools [266].

If only the 3D transformation data, and not the objects, are to be compiled into the cel, ensure that the Invisible Objects box is checked in the Live Surface Settings group box. The Frame / Field Type will be set automatically to the render settings used in Autodesk® 3ds Max®.

NOTE

If the start frame selected for the cel compilation is not the first frame rendered out from the Autodesk 3ds Max, then the CG Tools user interface ((Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab [272])) may not display the full object names when it identifies the separate live surfaces. This is because the object names are only written to the first .RPF file of a rendered sequence.

8.22.9　Assigning playout graphics to the live surfaces

Once a live surface cel is in place within a Clarity page, one or more graphic objects can be assigned to each live surface using the Cel and Object Live Surfaces (Live Surfaces) (Assign) 272 on the Graphic Tools 266. To assign a Clarity graphic object onto the surface of a live surface cel, the object to be assigned should be created in an unused area of the page. Configuration of available live surfaces for the selected live surface cel animation in the Graphic Edit window 260 is achieved again using the Cel and Object Live Surfaces (Live Surfaces) (Assign) control tab 272 on the Graphic Tools.

8.23　Loading and saving a hardware configuration

8.23.1　Overview

Clarity system unit hardware configurations can be saved 513 and subsequently loaded 514 to enable the system unit to be configured to run in different operating scenarios.

For example, if a Clarity system unit is used in an edit suite and as a stand alone unit for conference work, two different configurations could be stored under specific names. When the machine is transferred between the two environments, the appropriate configuration could then be loaded. Hardware configurations are maintained using the SD Hardware Configuration dialog box 786 which can be displayed by selecting Options> 429 Hardware>SD Settings 431.

8.23.2　Where are configurations stored?

Configurations are saved as text files with the extension .CFG and should always be saved to the following folder:

`C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Configurations`

8.23.3　What happens the first time you operate a Clarity system unit?

By default, a Clarity system unit will run using a default internal configuration until the first .CFG file has been saved. After this precedent, a Clarity software/system unit will always be configured using the configuration that was last loaded.

8.23.4　Saving a configuration

After specifying the desired hardware configuration settings using the SD Hardware Configuration dialog box 786, follow the steps below to save a .CFG configuration file based on the current configuration:

1. With the SD Hardware Configuration dialog box 786 displayed, select Save to save the new configuration. The Save Hardware Configuration dialog box appears.
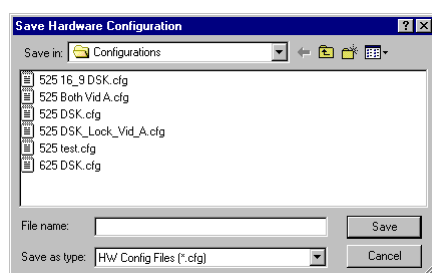
2. In the Filename text box, type a name for the new hardware configuration file or select an existing file to overwrite.
3. Select OK to save the file.

NOTES

The settings specified in the saved .CFG file will be used every time the Clarity software is started.

8.23.5 Loading a configuration

To load a desired saved hardware configuration, follow the steps below:

1. With the <u>SD Hardware Configuration dialog box</u> ⌐786⌐ displayed, select Load to open the new configuration. The Open Hardware Configuration dialog box appears.
2. In the Filename text box, type an existing name or select an existing file from the list.
3. Select OK to open the file.

NOTES

The settings specified in the loaded .CFG file will be used every time the Clarity software is started.

8.24 Motion markers

Motion makers can be inserted into any text object. Motion markers can be inserted using the <u>Text></u> ⌐408⌐ <u>Markers>Insert>Motion</u> ⌐411⌐ command. The <u>Motion Marker dialog box dialog box</u> ⌐739⌐ is displayed. Motion markers enable you to control the playout of animation. Control can be actioned over:

- <u>foreground animation</u> ⌐440⌐ that affects an entire page (i.e pages that are configured with a foreground animation type other than Static (see <u>Animation Type drop-down list box</u> ⌐761⌐ on the <u>Foreground dialog tab</u> ⌐760⌐ on the <u>Page Settings dialog box</u> ⌐751⌐);
- page element animation implemented via animation markers on foreground page elements (see <u>Animation Marker dialog box)</u> ⌐565⌐ that use the following <u>Cool Move</u> ⌐462⌐ animation effects.

   <u>Continuous Ticker</u> ⌐462⌐
   <u>Crawl</u> ⌐462⌐
   <u>Reverse Roll</u> ⌐463⌐
   <u>Reverse Crawl</u> ⌐463⌐
   <u>Roll</u> ⌐463⌐

   The table below shows the available motion markers and the situations in which they can be used:

Marker	Identification	Applies to	
		Foreground animation	Page element animation
<u>Pause</u> ⌐517⌐	P	Yes	Yes
<u>Pause & Speed</u> ⌐517⌐	PS	No	Yes
<u>Speed</u> ⌐519⌐	S	Yes	Yes
<u>Stop</u> ⌐521⌐	X	Yes	Yes
<u>Trigger</u> ⌐523⌐	K	No	Yes

When controlling page element based animation using motion markers, the following conditions apply:

a) use of motion markers with the <u>Crawl</u> ⌐462⌐, <u>Reverse Roll</u> ⌐463⌐, <u>Reverse Crawl</u> ⌐463⌐ and <u>Roll</u> ⌐463⌐ Cool Move animation effects require that there are no <u>Twists</u> ⌐582⌐ or <u>Stagger</u> ⌐581⌐ configured.

After animation has started, by default, an inserted motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a <u>target area</u> ⌐515⌐ within the page that, when breached, will action the motion marker.

Left CTRL + Left ALT + M

8.24.1   Configuring a target screen area

After animation has started, by default, an inserted motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a target area within the page that, when breached, will action the motion marker. When configuring a motion marker, use the X Pos and Y Pos text boxes ⌐741⌐ in the Target Screen Position group box ⌐741⌐ on the Motion Marker dialog box ⌐739⌐ to define a target screen area. After selecting OK to insert the marker, you can then edit the target area interactively using the mouse in a similar way to masks on animation effects ⌐572⌐.

Let take the example of a simple page foreground roll (configure using the Foreground dialog tab ⌐760⌐ on the Page Settings dialog box ⌐751⌐) that is paused using a Pause motion marker ⌐517⌐ that is inserted into a text page on line 4 (1).

In previous versions of the software, the following would occur after going online

* The foreground animates in the desired direction until the marker passes the EDGE of the screen area (2).
* Foreground animation then pauses based on the markers' settings and subsequently restarts until the text object is animated completely out of the screen area (3).
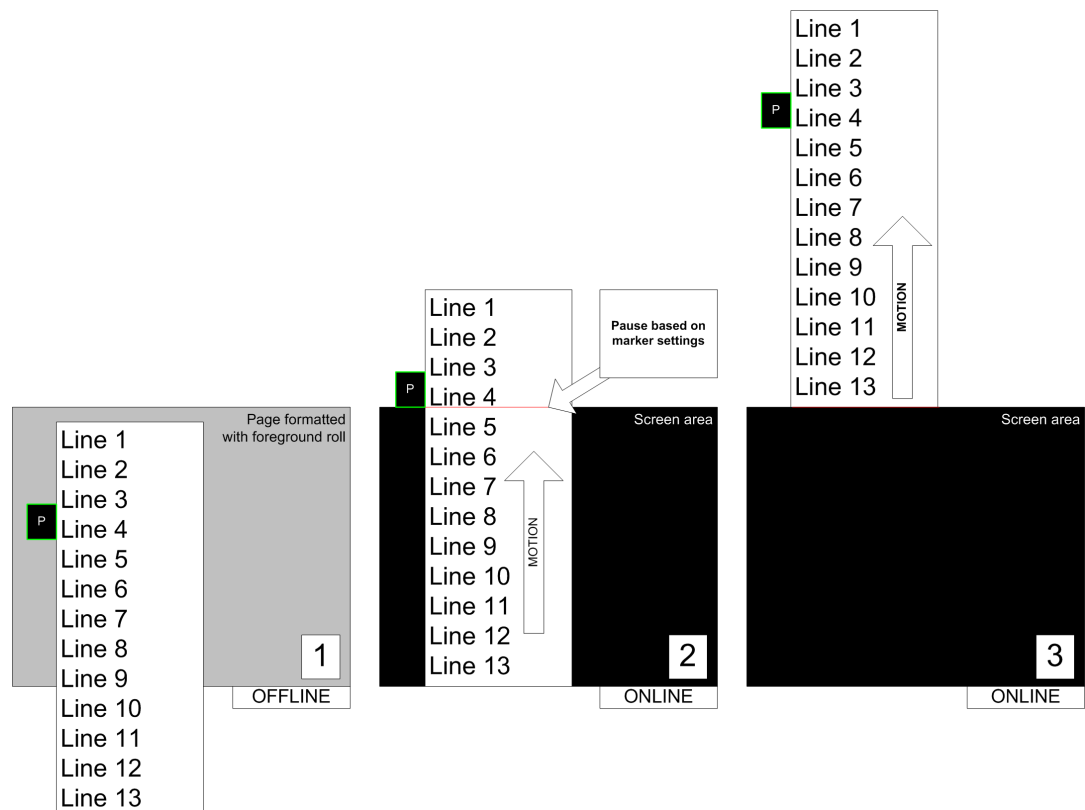
Now you have the alternative method of specifying a target area within the page, instead of relying on the marker to pass the edge of the screen area. With a page open in the Graphic Edit window ⌐260⌐ similar to that shown in the example above, follow the steps below to insert a Pause motion marker with default settings and then subsequently configure a target screen area interactively:

1. With the text cursor in the desired position (e.g. line 4 in the text page as shown above), select Text> ⌐408⌐ Markers>Insert>Motion ⌐411⌐. The Motion Marker dialog box ⌐739⌐ is displayed.
2. Select Pause from the Type group box ⌐739⌐.
3. Check the Target Screen Position box. ⌐741⌐
4. Using the X Pos and Y Pos text boxes ⌐741⌐, specify values of `200` and `150` respectively.
5. Leave all other values with their default settings, then select OK.

   The Pause motion marker is inserted. The page in the Graphic Edit window ⌐260⌐ should show the target screen position, indicated at the point where the green dotted horizontal and vertical lines cross. The horizontal (x) and vertical (y) lines can be manipulated independently using the arrow handles. Both the horizontal (x) and vertical (y) lines can be manipulated together using the cross handle.
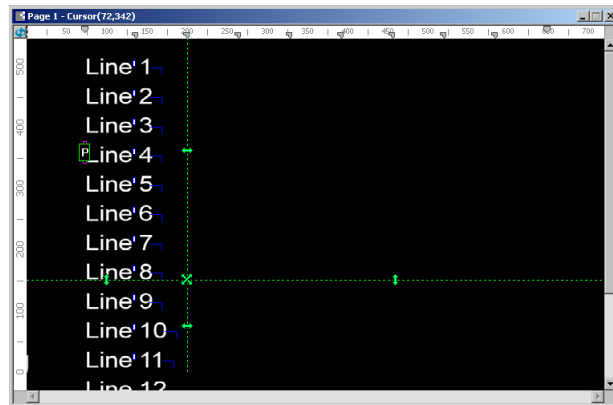
The location of the target screen area is dependant on which direction the motion is started from. So for a roll, because the motion is vertical, the horizontal (x) component of the target is relevant. In this example, the horizontal (x) line defines the point where the Pause motion marker will be actioned during the foreground roll. So, with the above target screen area defined, the following would now occur after going online:

- The foreground animates in the desired direction until the marker passes the horizontal (x) component of the specified target screen area (2).
- Foreground animation then pauses based on the markers' settings and subsequently restarts until the text object is animated completely out of the screen area (3).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   516

Copyright © 2000-2006 Pixel Power Ltd.
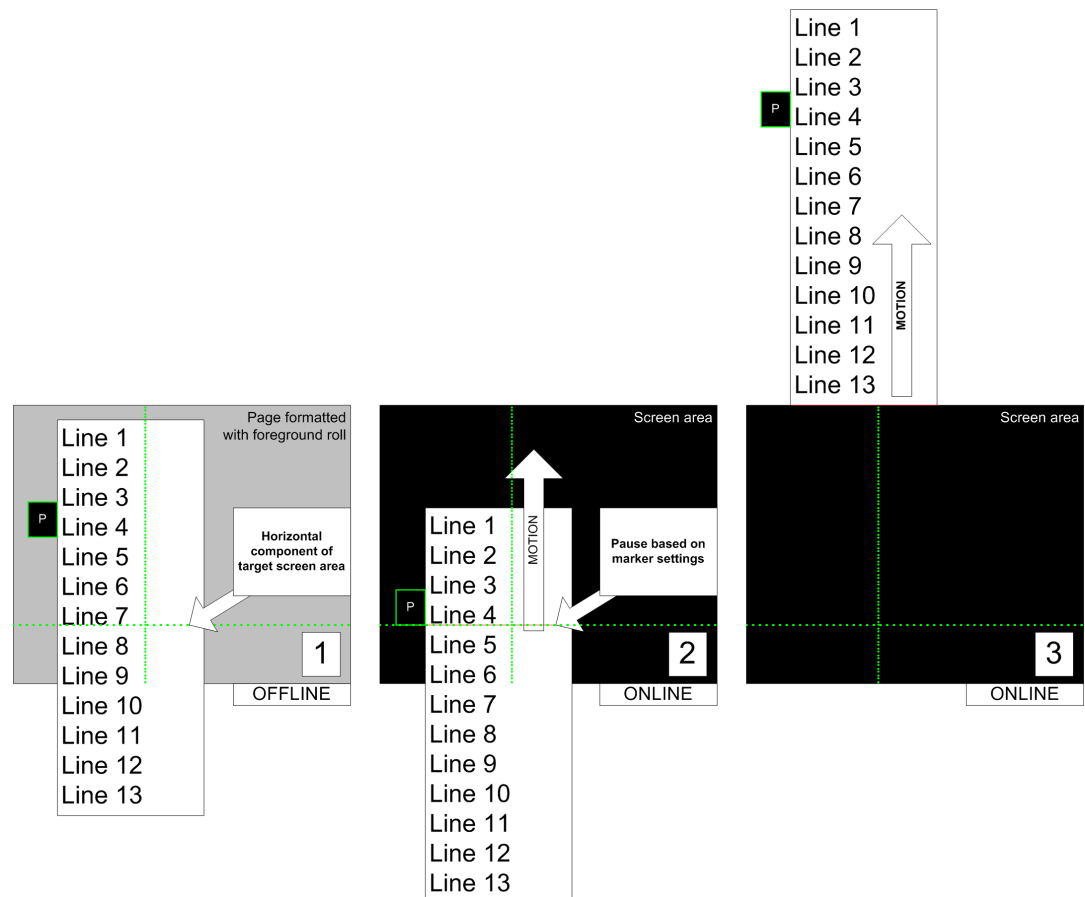
8.24.2   Pause motion marker

The Pause motion marker can be used to decelerate, pause, re-start and accelerate:

- [foreground animation](440) that affects an entire page (i.e. pages that are configured with a foreground animation type other than Static (see [Animation Type drop-down list box](761) on the [Foreground dialog tab](760) on the [Page Settings dialog box](751));
- page element animation implemented via animation markers on foreground page elements (see [Animation Marker dialog box](565)) that use the following [Cool Move](462) animation effects.

  [Continuous Ticker](462)
  [Crawl](462)
  [Reverse Roll](463)
  [Reverse Crawl](463)
  [Roll](463)

Pause motion markers can be configured to [wait for a delay](740) or [wait for a key](740) to be pressed before the pause is initiated. You can apply [deceleration](740) and [acceleration](740) to the animation before and after the pause is actioned. After animation has started, by default, an inserted pause motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a [target area](741) within the page that, when breached, will action the motion marker. If you are using a Pause motion marker in conjunction with a [Continuous Ticker](462) animation effect, you can optionally configure when the motion marker is actioned if [looping is configured](741) for the Continuous Ticker animation effect.

NOTE

For information on an example use of the Pause motion marker, see [Configuring a target screen area](515).

8.24.3   Pause & Speed motion marker

The Pause & Speed motion marker can be used to pause, change the animation speed and re-start:

- page element animation implemented via animation markers on foreground page elements (see [Animation Marker dialog box](565)) that use the following [Cool Move](462) animation effects.

  [Continuous Ticker](462)
  [Crawl](462)
  [Reverse Roll](463)
  [Reverse Crawl](463)
  [Roll](463)

Pause & Speed motion markers can be configured to [wait for a delay](740) or [wait for a key](740) to be pressed before the pause is initiated. You can apply [deceleration](740) and [acceleration](740) to the animation before and after the pause is actioned. Whilst animation is paused, a Pause & Speed motion marker can change the speed of further animation after it has been re-started. This can be achieved by [configuring a value in pixels-per-frame](741). After animation has started, by default, an inserted Pause & Speed motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a [target area](741) within the page that, when breached, will action the motion marker. If you are using a Pause & Speed motion marker in conjunction with a [Continuous Ticker](462) animation effect, you can optionally configure when the motion marker is actioned if [looping is configured](741) for the Continuous Ticker animation effect.

SEE ALSO

[Example A - Pause & Speed motion marker that affects a roll animation effect](518)

8.24.3.1 Example A - Pause & Speed motion marker that affects a Continuous Ticker animation effect

In this example, a Pause & Speed motion marker 517 is used to pause, change the animation speed and re-start a Cool Move Continuous Ticker animation effect when motion breaches the defined target screen area. The example features a single text element: Text Page A 520.
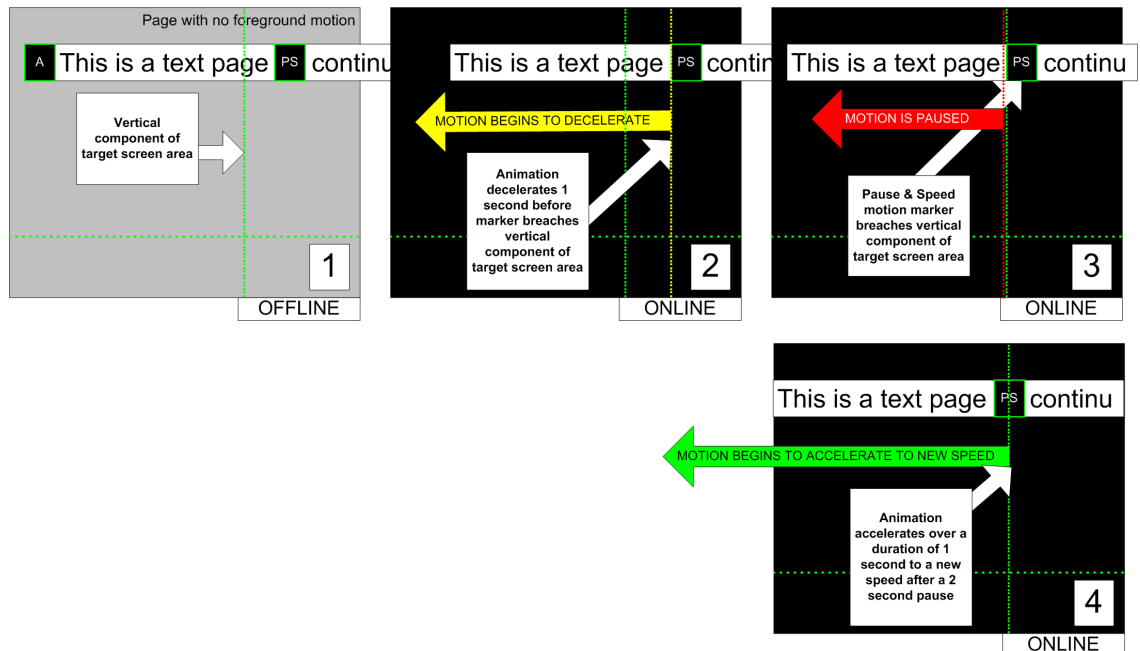
8.24.3.1.1 Text Page A

Text Page A features the text which is used in the Continuous Ticker animation effect.

A Cool Move 462 Continuous Ticker animation marker 462 is inserted (Text> 408 Markers>Insert>Animation) 411 at the start of the text page and the Animation Marker dialog box 565 is formatted with the following settings:
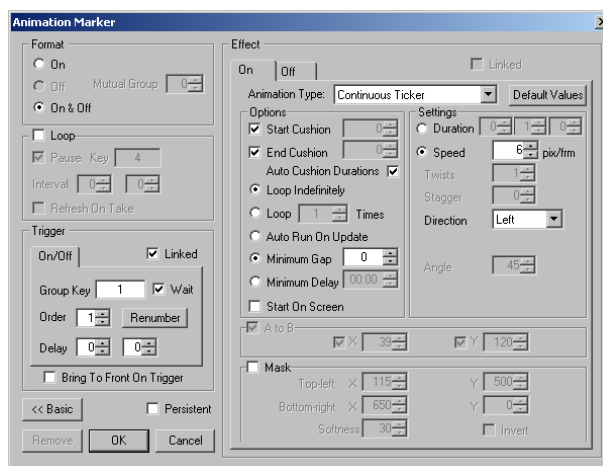
A Pause & Speed motion marker 517 is then inserted into the same text page. Its position is not relevant as a target screen area 515 will be defined. The Motion Marker dialog box 739 is configured with the following settings:
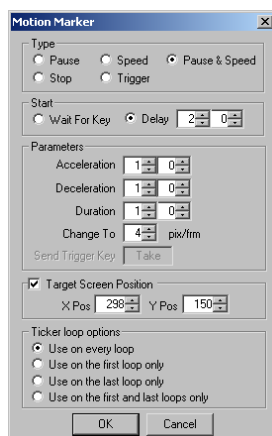
The Pause & Speed motion marker is configured so that the pause waits for 2 seconds time before animation is re-started (Delay radio button and increment boxes 740). The Acceleration 740 and Deceleration increment boxes 740 are set to 1 second. This defines that the animation effect will:

- decelerate 1 second before the Pause & Speed motion marker breaches the vertical (y) component of the defined target screen area:
- accelerate for 1 second after the 2 second pause delay is complete.

After animation is re-started and the initial acceleration period has passed, the values in the Duration 740 and Change to increment boxes 741 define that the animation effect will accelerate to a speed of 4 pixels per frame over a duration of 1 second.

The target screen area is then configured interactively using the mouse. Because the motion of the Continuous Animation animation effect is horizontal, the vertical (y) component of the target screen area is relevant. In this example, the vertical (y) line defines the point where the Pause & Speed motion marker will be actioned during the Continuous Animation animation effect. The illustration below shows the defined target screen area.
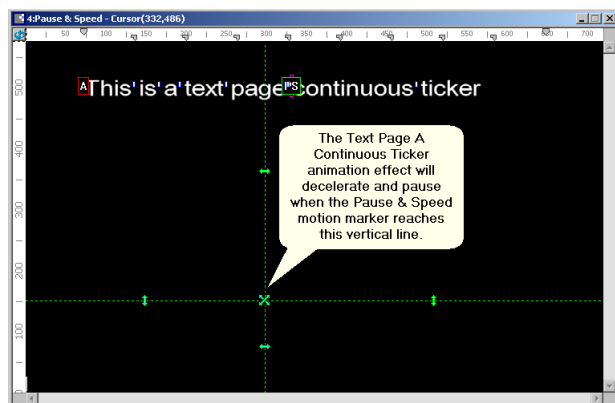
8.24.4   Speed motion marker

The Speed motion marker can be used to change the speed of:

- foreground animation 440 that affects an entire page (i.e. pages that are configured with a foreground animation type other than Static (see Animation Type drop-down list box 761 on the Foreground dialog tab 760 on the Page Settings dialog box 751);
- page element animation implemented via animation markers on foreground page elements (see Animation Marker dialog box 565) that use the following Cool Move 462 animation effects.

    Continuous Ticker 462
    Crawl 462
    Reverse Roll 463
    Reverse Crawl 463

Roll $\boxed{463}$

Speed motion markers can change the speed of animation over time. This can be achieved by a configuring a speed in pixels-per-frame $\boxed{741}$ over a set duration $\boxed{740}$. After animation has started, by default, an inserted Speed motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a target area $\boxed{741}$ within the page that, when breached, will action the motion marker. If you are using a Speed motion marker in conjunction with a Continuous Ticker $\boxed{462}$ animation effect, you can optionally configure when the motion marker is actioned if looping is configured $\boxed{741}$ for the Continuous Ticker animation effect.

SEE ALSO

Example A - Speed motion marker that affects a Continuous Ticker animation effect $\boxed{520}$

8.24.4.1 Example A - Speed motion marker that affects a Continuous Ticker animation effect

In this example, a Speed motion marker $\boxed{519}$ is used to accelerate a Cool Move Continuous Ticker animation effect to a new speed when motion breaches the defined target screen area. The example features a single text element: Text Page A $\boxed{520}$.
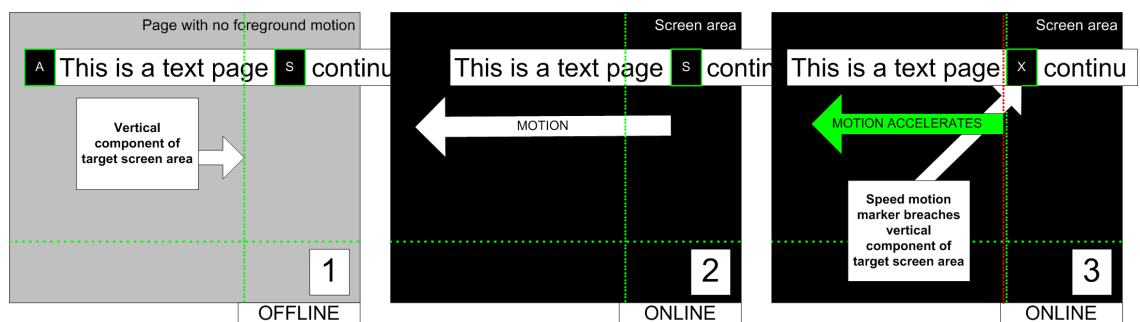
8.24.4.1.1 Text Page A

Text Page A features the text which is used in the Continuous Ticker animation effect.

A Cool Move $\boxed{462}$ Continuous Ticker animation marker $\boxed{462}$ is inserted (Text> $\boxed{408}$ Markers>Insert>Animation) $\boxed{411}$ at the start of the text page and the Animation Marker dialog box $\boxed{565}$ is formatted with the following settings:
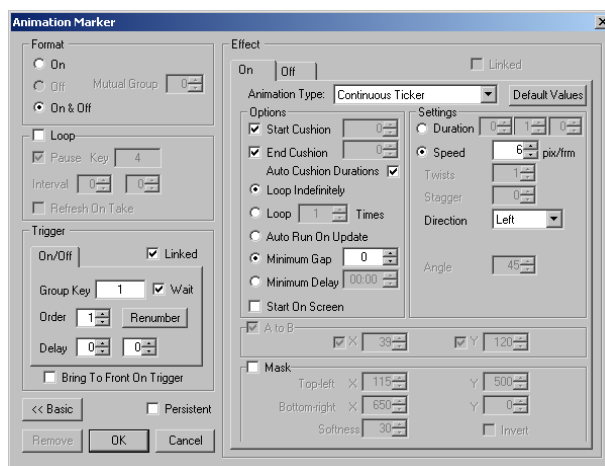
A Speed motion marker $\boxed{519}$ is then inserted into the same text page. Its position is not relevant as a target screen area $\boxed{515}$ will be defined. The Motion Marker dialog box $\boxed{739}$ is configured with the following settings:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   520

Copyright © 2000-2006 Pixel Power Ltd.
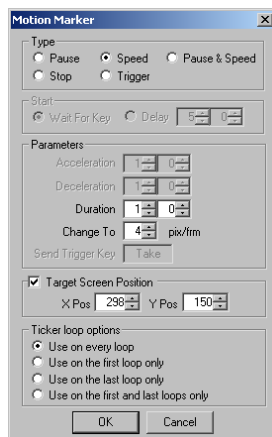
Pay particular attention to the Duration 740 and Change to 741 values. This defines that the animation effect will accelerate to a speed of 4 pixels per frame over a duration of 1 second when the Speed motion marker breaches the vertical (y) component of the defined target screen area.

The target screen area is then configured interactively using the mouse. Because the motion of the Continuous Animation animation effect is horizontal, the vertical (y) component of the target screen area is relevant. In this example, the vertical (y) line defines the point where the Speed motion marker will be actioned during the Continuous Animation animation effect. The illustration below shows the defined target screen area.
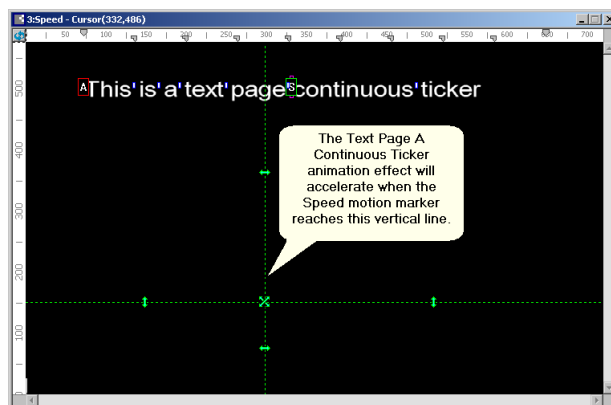
8.24.5   Stop motion marker

The Stop motion marker can be used to decelerate and stop:

- foreground animation 440 that affects an entire page (i.e. pages that are configured with a foreground animation type other than Static (see Animation Type drop-down list box 761 on the Foreground dialog tab 760 on the Page Settings dialog box 751);
- page element animation implemented via animation markers on foreground page elements (see Animation Marker dialog box 565) that use the following Cool Move 462 animation effects.

  Continuous Ticker 462
  Crawl 462
  Reverse Roll 463
  Reverse Crawl 463
  Roll 463

You can apply deceleration 740 to the animation before the Stop motion marker is actioned. Once stopped, animation CANNOT be re-started. After animation has started, by default, an inserted Stop motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a target area 741 within the page that, when breached, will action the motion marker. If you are using a Stop motion marker in conjunction with a Continuous Ticker 462 animation effect, you can optionally configure when the motion marker is actioned if looping is configured 741 for the Continuous Ticker animation effect.

8.24.5.1 Example A - Stop motion marker that affects a Continuous Ticker animation effect

In this example, a Stop motion marker 521 is used to decelerate and stop a Cool Move Continuous Ticker animation effect when motion breaches the defined target screen area. The example features a single text element: Text Page A 522.
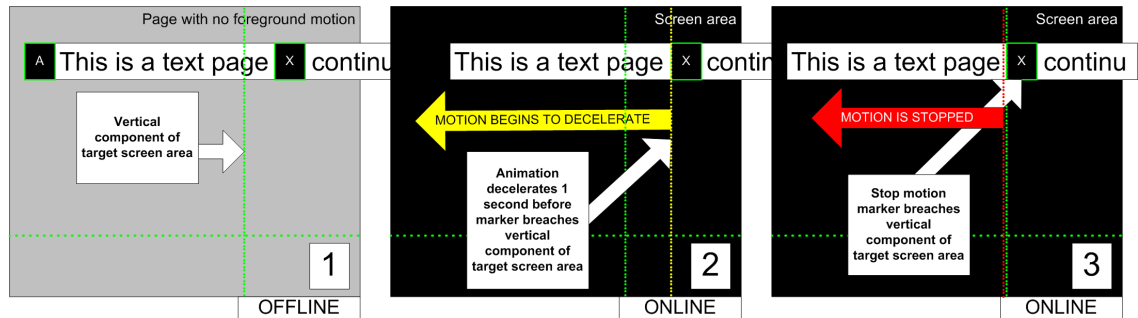
8.24.5.1.1 Text Page A

Text Page A features the text which is used in the Continuous Ticker animation effect.
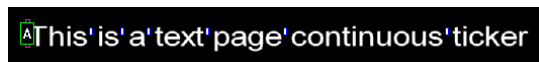
A Cool Move 462 Continuous Ticker animation marker 462 is inserted (Text> 408 Markers>Insert>Animation) 411 at the start of the text page and the Animation Marker dialog box 565 is formatted with the following settings:
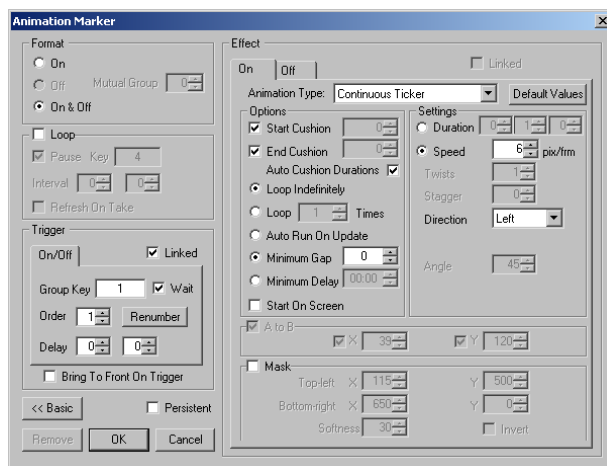
A Stop motion marker 521 is then inserted into the same text page. Its position is not relevant as a target screen area 515 will be defined. The Motion Marker dialog box 739 is configured with the following settings:
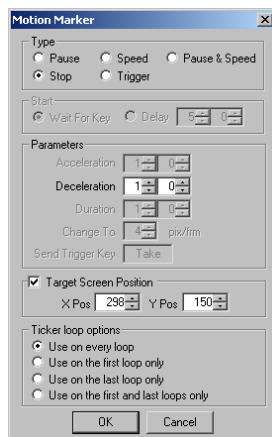
Pay particular attention to the Deleration value 740. This defines that the animation effect will begin to decelerate 1 second before the Stop motion marker breaches the vertical (y) component of the defined target screen area.

The target screen area is then configured interactively using the mouse. Because the motion of the Continuous Animation animation effect is horizontal, the vertical (y) component of the target screen area is relevant. In this example, the vertical (y) line defines the point where the Stop motion marker will be actioned during the Continuous Animation animation effect. The illustration below shows the defined target screen area.
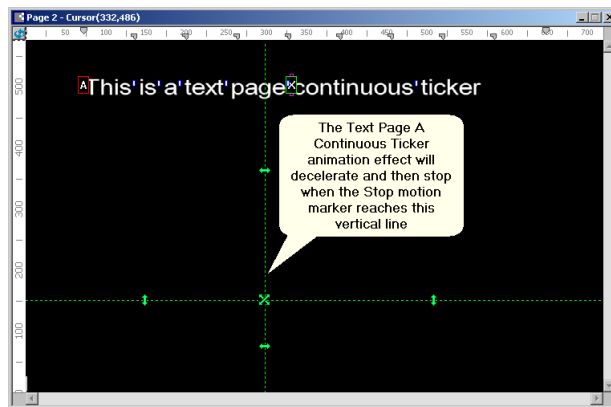
8.24.6 Trigger motion marker

The Trigger motion marker can be used to trigger other animations on the same page when used in conjunction with:

- page element animation implemented via animation markers on foreground page elements (see Animation Marker dialog box 565) that use the following Cool Move 462 animation effects.

  Continuous Ticker 462
  Crawl 462
  Reverse Roll 463
  Reverse Crawl 463
  Roll 463

Trigger motion markers use a defined trigger key to action any animations on the current page that use the same trigger key. After animation has started, by default, an inserted Ticker motion marker will be actioned when the marker passes the edge of the screen area. If this behaviour is not desired, you can optionally specify a target area 741 within the page that, when breached, will action the motion marker. If you are using a Trigger motion marker in conjunction with a Continuous Ticker 462 animation effect, you can optionally configure when the motion marker is actioned if looping is configured 741 for the Continuous Ticker animation effect.

SEE ALSO

Example A - Trigger motion marker that affects a crawl animation effect 524

8.24.6.1 Example A - Trigger motion marker that affects a Crawl animation effect

In this example, a Trigger motion marker 523 is used to start another text animation on the same page when motion breaches the defined target screen area. The example features two text elements: Text Page A 524 and Text Line A 525
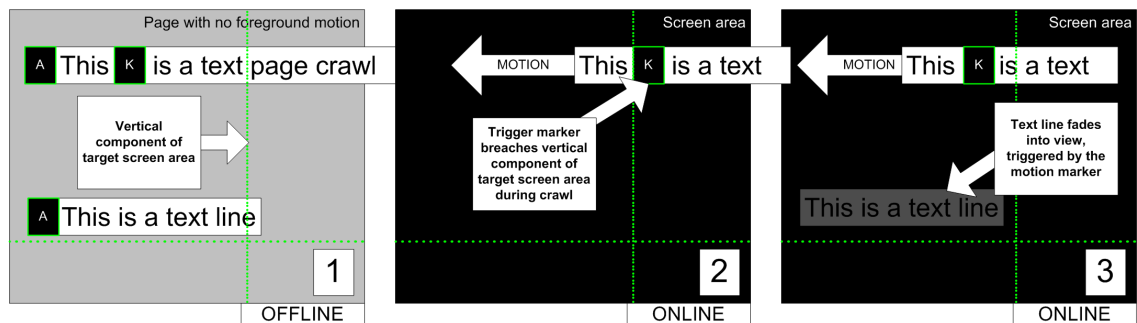
8.24.6.1.1 Text Page A

Text Page A features the text which is used in the Crawl animation effect.

A Cool Move 462 Crawl animation marker 462 is inserted (Text> 408 Markers>Insert>Animation) 411 at the start of the text page and the Animation Marker dialog box 565 is formatted with the following settings:
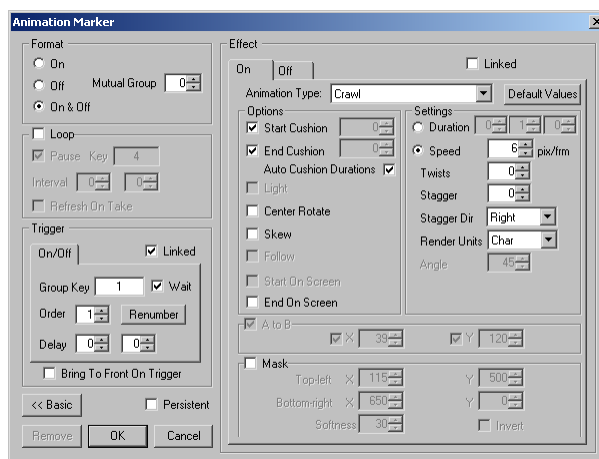
A Trigger motion marker 523 is then inserted into the same text page. Its position is not relevant as a target screen area 515 will be defined. The Motion Marker dialog box 739 is configured with the following settings:
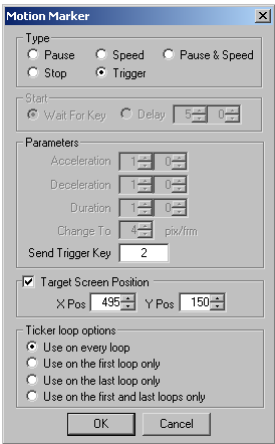
Pay particular attention to the Send trigger key value 741. This matches the On trigger key that is assigned to the Fade animation marker effect in Text Line A.

The target screen area is then configured interactively using the mouse. Because the motion of the crawl animation effect is horizontal, the vertical (y) component of the target screen area is relevant. In this example, the vertical (y) line defines the point where the Trigger motion marker will be actioned during the Crawl animation effect. The illustration below shows the defined target screen area.
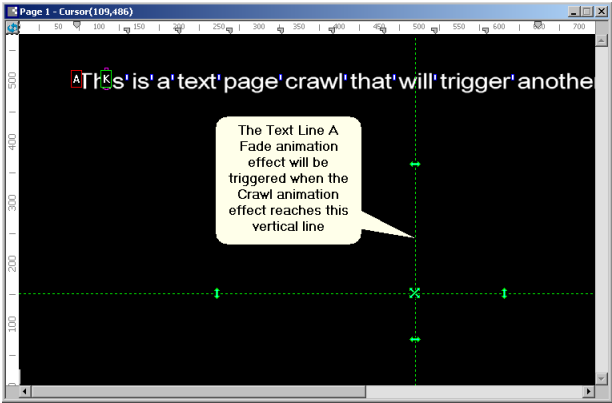
8.24.6.1.2   Text Line A

Text Line A features text that will be animated when the Trigger motion marker in Text Page A breaches the vertical (y) component of the defined target screen area.

A Cool Move 462 Fade animation marker 535 is inserted (Text> 408 Markers>Insert>Animation) 411 at the start of the text line and the Animation Marker dialog box 565 is formatted with the following settings:
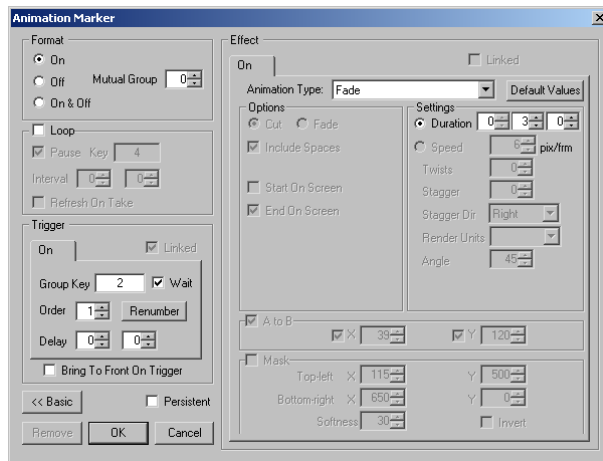
Notice that the trigger key (Group Key text box [584] in the Trigger group box [583]) matches that defined in the Send trigger key text box [741] on the Motion Marker dialog box [739].

The completed page should appear similar to the following illustration:
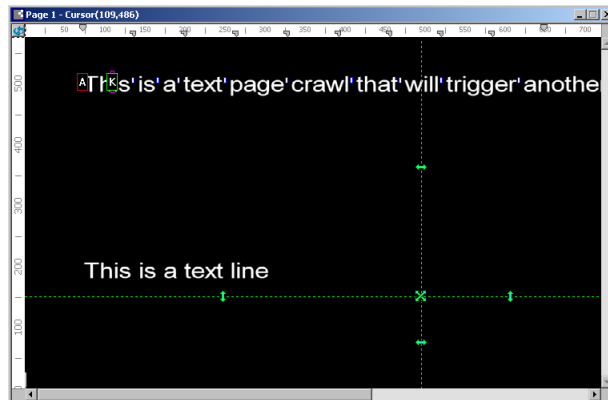
8.25   MXF files

Material eXchange Format (MXF) is a file format for professional digital video and audio media defined by a set of SMPTE standards. MXF is a "container" or "wrapper" format that supports a number of different streams of coded "essence", encoded with any of a variety of codecs, together with a metadata wrapper which describes the material contained within the MXF file. MXF has been designed to address a number of problems with non-professional formats. MXF has full timecode and metadata support, and is intended as a platform-agnostic stable standard for future professional video and audio applications.

NOTE

To export .PPV and .PPA video and audio files to MXF format, you will need to purchase and install the MXF Plugin [LICENSED] [26] option if you have not done so already.

SEE ALSO

File> [378] Import>MXF Import [382]
File> [378] Export>MXF Export [383]
MXF Import dialog box [743]
MXF Export dialog box [741]

8.25.1 MXF Export and MPEG-2 Type D-10 (SMPTE 356M) support

To export .PPV and .PPA video and audio files to MXF format, you will need to purchase the optional MXF Plugin [LICENSED] 26 software option if you have not done so already. Supplied as a standalone component installation requiring activation via a licence key supplied by Pixel Power Ltd.

Please contact Pixel Power support 103 for more information.

In brief, the option enables media data encoding, decoding, de-multiplexing, and dumping. The recently implemented MPEG-2 Type D-10 (SMPTE 356M) support makes it possible to interpret streams compatible with the Type D-10 format digital editing systems and recorders. It is composed of MPEG Video 4:2:2 I-frame only and 8-channel AES3 audio streams. These AES3 audio streams usually contain 24-bit PCM audio samples.

Source format	SDTV (480i and 576i)
Bitrate	Up to 50 Mb/s
GOP structure	I-frame only
Chroma format	4:2:2
Profile/Level	4:2:2P@ML

NOTE

MPEG-2 Type D-10 (SMPTE 356M) is also called IMX by Sony.

SEE ALSO

http://www.snellwilcox.com/mxf/index.php
http://www.pro-mpeg.org/
http://www.smpte.org

8.26 Ramcorder

The Ramcorder is a frame buffer that enables the viewing, manipulation and playout of a series of video frames. It is able to cope with video clips containing a number of frames limited only by the size allocated disk cache, but at any one moment only a certain number of frames will be available for manipulation/playout. This number of "live" frames will be determined by PC memory (RAM), software setup, video configuration and any hardware that is available. Before the Ramcorder can be used, a page must be open within the Graphic Edit window 260. The Ramcorder will use this window to determine what video standard and aspect ratio it should be in.

More information to be added at a later date.

<PAW>

8.27 Roller adjust functionality

The roller adjust functionality applies to pages which have a vertical foreground motion e.g. a roll or a croll of angle 90° or 270°. If these pages are displayed with a motion speed that is exactly (or close to) an odd number of lines per field, the perceived quality of the moving foreground display elements will be seriously reduced (especially at SD definition).

This phenomenon is due to the properties of interlaced video which effectively halves the vertical resolution of objects moving at these speeds.

The simplest way to solve this problem is to select a motion speed that is an even number of lines per field. However, in the real world this is not generally possible since the amount of text and the duration of the roll are normally constrained by the needs of the programming schedule. In order to provide a way of displaying these rollers cleanly, the Text> 408 Roller Adjust Text 418 and Graphics> 395 Roller Adjust All 408 commands may be used.

Roller adjust works by examining the height of the active roller area. This can be the entire foreground area or the area between any motion markers 514 that are present. It then calculates the percentage by which the height of the page would either have to be increased or decreased to make it run at an improved roll speed and then adjusts the line spacing of the text page to give a suitable overall page length.

Furthermore, it can optionally scale the positions of any other display elements on the page to ensure they remain aligned with the text that they originally aligned with. Must have a page containing a text page or other foreground

element and the foreground page animation must be set to either Roll or Reverse Roll.

8.28 Scripting

8.28.1 Page and field scripting

Any graphic object or page background that has a field marker attached to it can also be instructed to run a Microsoft Visual Basic script every time the object is displayed.

On the Field Settings control tab [283] used to set up the parameters for the field marker, you are able to specify the name of a script file that the object is attached to. In addition to individual field scripting, you can also specify that a page runs scripts on all of the fields contained within it; this achieved using the Automation dialog tab [754] on the Page Settings dialog box [751].

Pages can be associated to two types of script function, a pre-script and a post-script. The only difference between these two functions is when they are called. Every time a page is edited or prepared for playout, the scripting takes place in the following order:

- if the page has a pre-script associated with it then this is run first;
- each field that is attached to an individual field script, has its script run;
- if the page has a post-script associated with it then this is run last.

This means that it is possible to use them altogether, enabling complex three level processing on fields, or use just a single script, enabling a simpler level of processing.

The Scripting dialog tab [684] of the Job Preferences dialog box [679] feature several options that enable you to control when and how the script functions are run, if at all.

You can turn off scripting altogether (Scripting Active check box [685]), specify whether the scripts should run when a page is edited or just during playout (Run scripts on page edit check box [685]) and select whether messages should be displayed whilst scripts are running (Show Message Box Whilst Scripts Run check box [685]). You can also decide whether during playout the script is run on the actual page stored in the job, or just on the copy taken whilst the page is being played out (Only run scripts on playout page copy i.e. leave orig. template alone check box [685]).

If your template pages contain place holder text that you do not want to be overwritten, or if the results of any scripts are only meaningful when pages are on air, then these settings enable you to make sure that the actual contents of your template job are not overwritten during scripting, and you still see the correct results on playout.

8.28.1.1 Writing script code for use with Clarity

The file `scripts.vbs` contained within the `SubFiles` folder of your CG Tools installation folder is an example script file that defines the expected function prototypes for the Microsoft Visual Basic script calls that the application can make into your script file. Each of these functions is called under different circumstances and they are explained in subsequent sections.

Script function	Description
Page pre-script (JobPagePreScript) [529]	Called when you assign a script file to the pre-script section on the page properties window.
Page post-script (JobPagePostScript) [530]	This function has the same input parameters as JobPagePreScript [529] and expects the same kind of return. The only difference is at which point the function is called.
Page background script (PageBackgroundScript) [530]	Called when you associate a script to the individual field attached to a page background.
Cutout script (CutoutScript) [530]	Called when you associate a script to the individual field applied to a cutout graphic in a foreground layer of a page.
Text field script (TextFieldScript) [531]	Called when you associate a script to the individual field applied to a piece of text in a foreground layer of a page.
Cel animation script (CelScript) [531]	Called when you associate a script to the individual field applied to a cel animation in a foreground layer of a page.
Paste live script (LiveScript) [531]	Called when you associate a script to the individual field applied to a paste live object in a foreground layer of a page.

Script function	Description
Paste clip script (ClipScript) 532	Called when you associate a script to the individual field applied to a paste clip object in a foreground layer of a page.

8.28.1.1.1   Page pre-script (JobPagePreScript)

This function is the function that is called when you assign a script using the Page uses a 'Pre' script group box 755 on the Automation dialog tab 754 on the Page Settings dialog box 751.

```
Function JobPagePreScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, nFields,
aFieldData())

      JobPagePreScript = aFieldData

End Function
```

The input parameters have the following meanings:

Parameter	Description
bstrJobPath	The full path to the job currently calling the script function. It is purely for use within the script function, enabling you to potentially use the same script for multiple job files, with the script code making decisions based on the path supplied here.
nPageNumber	The number of the page calling the script function. Again its purpose is to enable the script to make decisions based on the page number if required.
nChannel	If the script is being called during page playout, then this will be the channel number the page is being played out on. This enables the script to ensure that a single page can be made to look different, depending on the channel it is played out on, potentially simplifying your job without sacrificing a different look on each channel.
bstrDateTime	The current date and time that the script is being called at. It is in the format `day/month/year hour:minute:second`.
nFields	The number of fields on the page and hence the number of fields for which information is contained within the following array of field data.
aFieldData	This is an array of visual basic *VARIANTS*. It contains three entries for each field (all `VARIANT BSTR`). • the first is a string containing the field number e.g. `0`, `1`, `11` etc.; • the second is a string indicating the type of the field and the valid types are `Background`, `Text`, `Cutout`, `Cel`, `Clip`, `Live`. • the third value is the current data for the field. This field data takes the same format as all other field updates, so for backgrounds it is something like `PIC:C:\Pics\Bg1.ppi` or `VID:clips/backs/back2`, for text it is the characters in the field +/- any embedded commands, for cutouts, cels and clips it is the path to the image, cel or video clip for the object.

So for example, if you had two text fields on a page, field 1 containing the word `London` and the field 2 containing the word `England`, the `aFieldData` array you received inside the script file would contain :

```
aFieldData(0) -> '1'
aFieldData(1) -> 'Text'
aFieldData(2) -> 'London'
aFieldData(3) -> '2'
aFieldData(4) -> 'Text'
aFieldData(5) -> 'England'
```

The example script function provided at the top of this section just returns the same data as passed in :

```
JobPagePreScript = aFieldData
```

To make the function actually do something, you need to process the data. To do this, you will need to pass back a different array than that passed in. The array returned needs to be of the same format to that passed in, i.e. an array of *VARIANTS*, with three entries for each field you are returning. You do not have to pass back an array with all of the fields passed in, however most of the time you will want to, so the easiest way to do that is just to make a copy of the incoming array and then do your processing on that. A simple example of this is shown below, where the two incoming

text strings are converted to upper case.

```
Function JobPagePreScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, nFields,
aFieldData())

      ' Make a copy of the incoming field data
      aResults = aFieldData

      ' Convert the text field data to upper case
      aResults(2) = UCase(aResults(2))
      aResults(5) = UCase(aResults(5))

      ' Return the results of our processing
      JobPagePreScript = aResults

End Function
```

This above function is making a number of assumptions about the incoming field data, namely that there are at least two fields and that they are both text fields. Making assumptions like this is perfectly acceptable if your script is to be used for a very specific set of circumstances, however if your script is to be more generic, then you will actually need to check and use the `nFields` parameter and contents of the `aFields` array inside the function.

8.28.1.1.2   Page post-script (JobPagePostScript)

This function has the same input parameters as <u>JobPagePreScript</u> [529] and expects the same kind of return. The only difference is at which point the function is called.

```
Function JobPagePostScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, nFields,
aFieldData())

      JobPagePostScript = aFieldData

End Function
```

8.28.1.1.3   Page background script (PageBackgroundScript)

This is the function that is called when you associate a script to the individual field attached to a page background.

```
Function PageBackgroundScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime,
bstrFieldID, bstrFieldData)

      PageBackgroundScript = bstrFieldData

End Function
```

It receives similar parameters to the <u>JobPagePreScript</u> [529] and <u>JobPagePostScript</u> [530] functions, except that instead of receiving and number of fields and an array of field information, it receives a single field ID string `bstrFieldID`, and a single field data string `bstrFieldData`.

This function expects a single string to be returned and the example just returns the same data as passed in. As with all page background field updates, the data contains information about the type of background, along with any parameters for that type. For instance:

String	Description
`PageBackgroundScript = "BLK"`	Configures the page background to black.
`PageBackgroundScript = "PIC:C:\PICS\Background_001.ppi"`	Configures the page background to picture `C:\PICS\Background_001.ppi`.
`PageBackgroundScript = "VID:clips/Backgrounds/Back_011"`	Configures the page background to the video clip `clips/Backgrounds/Back_011`.

8.28.1.1.4   Cutout script (CutoutScript)

This is the function that is called when you associate a script to the individual field applied to a cutout graphic in a foreground layer of a page.

```
Function CutoutScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, bstrFieldID,
bstrFieldData)
```

```
        CutoutScript = bstrFieldData

    End Function
```

It receives the same input parameters as <u>PageBackgroundScript</u> |530|, and should also return a string. For cutouts however, the field data is just the path to the image to be used and does not contain any parameters.

8.28.1.1.5   Text field script (TextFieldScript)

This is the function that is called when you associate a script to the individual field applied to a piece of text in a foreground layer of a page.

```
Function TextFieldScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime,
bstrFieldID, bstrFieldData)

        TextFieldScript = bstrFieldData

    End Function
```

It receives the same input parameters as <u>PageBackgroundScript</u> |530|, and should also return a string. Text fields can contain normal text information to display as well as all the usual embedded commands for changing styles and inserting logos, images or cel animations.

8.28.1.1.6   Cel animation script (CelScript)

This is the function that is called when you associate a script to the individual field applied to a cel animation in a foreground layer of a page.

```
Function CelScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, bstrFieldID,
bstrFieldData)

        CelScript = bstrFieldData

    End Function
```

It receives the same input parameters as <u>PageBackgroundScript</u> |530|, and should also return a string. For cel animations however, the field data is just the path to the cel animation file and does not contain any parameters.

8.28.1.1.7   Paste live script (LiveScript)

This is the function that is called when you associate a script to the individual field applied to a paste live object in a foreground layer of a page.

```
Function LiveScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, bstrFieldID,
bstrFieldData)

        LiveScript = bstrFieldData

    End Function
```

It receives the same input parameters as <u>PageBackgroundScript</u> |530|, and should also return a string. For paste live objects however, the field data is just a character that indicates the video source the live object should use. It can have the following values:

Value	Description
X	Use default for channel
A	Set to live A.
B	Set to live B.
C	Set to live C.
D	Set to live D.

8.28.1.1.8 Paste clip script (ClipScript)

This is the function that is called when you associate a script to the individual field applied to a paste clip object in a foreground layer of a page.

```
Function ClipScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, bstrFieldID,
bstrFieldData)

      ClipScript = bstrFieldData

End Function
```

It receives the same input parameters as <u>PageBackgroundScript</u> [530], and should also return a string. For clips however, the field data is just the path to the video clip to be used and does not contain any parameters.

8.29 Smart Moves

Smart Moves are essentially pre-rendered Cool Moves. Cool Moves work by rendering each field of animation in real-time. This limits the type of animations possible with Cool Moves to those that can be rendered quickly. Smart Moves work by rendering animations to disk at some time before going online. Once they have been pre-rendered, they can then be played out without any rendering overhead. As they are not rendered in real-time, Smart Moves can accomplish more computationally expensive animations such as defocus and explode.

Because Smart Moves need to be pre-rendered, it is important that they are rendered well before going on-air. If a Smart Move is not completely rendered before going online it will not play out correctly.

The following animation effects are available.

Explode (Smart) [533]	Perspective X/Y/XZ/YZ/XY (Smart) [533]	Swing (Smart) [533]	Zoom Fade (Smart) [534]
Fade (Smart) [533]	Pulse (Smart) [533]	Wobble (Smart) [534]	Zoom Focus (Smart) [534]
Focus (Smart) [533]	Spin (Smart) [533]	Zoom (Smart) [534]	

8.29.1 Smart Move limitations

Even though Smart Moves are pre-rendered, they still need to be displayed in real-time. If the moves are too big or there are too may moves being displayed at one time, the Clarity system unit may not be able to keep up a smooth frame rate. This can be avoided by either reducing the size of the text/logos or by spacing out moves so that they do not play simultaneously.

All characters/logos affected by the same marker are all rendered for each frame. This can cause long paragraphs/pages of text to reach the display limit; even with simple moves that are well spaced. If this happens, additional markers (of the same type) should be added at convenient points within the text.

A Clarity system unit can only render a finite number of characters within Smart Moves. If the Clarity system unit runs low on system resources when trying to display pre-rendered Smart Move animations whilst online, this will characterised by missing frames of animation and/or missing characters. The limit is difficult to predict and may be improved by one or more of the following:

- Reduce the number of elements in the animation, or split the animation into separate animation moves which follow in sequence.

8.29.2 Rendering Smart Moves and managing cache files

When Smart Moves are rendered, they are saved directly to disk and will stay there until they are needed i.e. they do not need to be re-rendered each time the job is loaded. The rendered Smart Moves are saved by default to the local hard disk on the Clarity system unit or the PC running Clarity PREP in the following folder:

<u>C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Smart Cache</u>

Inside the folder, there are folders for each job that has had Smart Moves rendered by the current machine. These

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   532

Copyright © 2000-2006 Pixel Power Ltd.

individual folders contain individual rendered Smart Moves for each job.

Obviously, smart cache files can become quite large, both in terms of memory and number, thus taking up a significant amount of disk space. If desired, these files can be deleted if they are no longer required. Although these files can be manually removed, it is generally easier and quicker to use the controls on the Caching dialog tab 707 on the Local Preferences dialog box 696.

NOTE

If you delete cache files, Smart Moves will have to be re-rendered before going online.

8.29.3   Descriptions

8.29.3.1   Explode (Smart)

Explodes characters/logos or graphics into very small pieces. The Light 576 parameter can be used to give an initial explosive flash. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.2   Fade (Smart)

Fades the characters/logos or graphics from transparent to opaque. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.3   Focus (Smart)

Causes the characters/logos or graphics to go from completely out of focus to completely in focus. This move is slow to render. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.4   Perspective X/Y/XZ/YZ/XY (Smart)

Spins characters/logos or graphics about their centre and around the given axis. Perspective and lighting are added to this move to give a pseudo 3D look. These moves look particularly good when applied to logos. The amount of spin is set using Twists 582. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.5   Pulse (Smart)

Characters/logos or graphics jump forward and flash to white. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.6   Spin (Smart)

Spins characters/logos or graphics about their centre. The amount of spin is set using Twist 582. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.7   Swing (Smart)

Swings characters/logos or graphics about the X axis. This gives the impression of a swinging sign. The amount of swing is set using Twist 582. Auto Cushion Durations 574, Stagger 581 and Start Cushion and End Cushion 578 can also be used. A to B 567 moves are available with this animation effect. Masks 572 are available with this animation effect.

8.29.3.8 Wobble (Smart)

Shears the characters/logos or graphics about their base line. The amount of wobble is set using Twist ⌐582⌐. Here the Twist parameter sets the number of complete wobbles. Auto Cushion Durations ⌐574⌐, Stagger ⌐581⌐ and Start Cushion and End Cushion ⌐578⌐ can also be used. A to B ⌐567⌐ moves are available with this animation effect. Masks ⌐572⌐ are available with this animation effect.

8.29.3.9 Zoom (Smart)

Zooms characters/logos or graphics from infinitely small to their normal size. Twist ⌐582⌐ can be used to add quarter rotations. Auto Cushion Durations ⌐574⌐, Stagger ⌐581⌐ and Start Cushion and End Cushion ⌐578⌐ can also be used. A to B ⌐567⌐ moves are available with this animation effect. Masks ⌐572⌐ are available with this animation effect.

8.29.3.10 Zoom Fade (Smart)

Zooms characters/logos or graphics from their original size to about 1.5 times their size and then fades until they vanish. Spin can be added using Twist ⌐582⌐. Auto Cushion Durations ⌐574⌐, Stagger ⌐581⌐ and Start Cushion and End Cushion ⌐578⌐ can also be used. Masks ⌐572⌐ are available with this animation effect.

8.29.3.11 Zoom Focus (Smart)

Zooms characters/logos or graphics from their original size to about 1.5 times their size and then de-focuses them until they vanish. Spin can be added using Twist ⌐582⌐. Auto Cushion Durations ⌐574⌐, Stagger ⌐581⌐ and Start Cushion and End Cushion ⌐578⌐ can also be used. Masks ⌐572⌐ are available with this animation effect. This move is slow to render.

8.30 Standard Moves

Standard Move animation effects work by rendering characters and logos into new positions every field in real-time. Vertical size changes can also be made, allowing twist or tumble effects to be achieved. Since Standard Move animations use a software rendering process, there is a finite area of screen which can be animated.

The following animation effects are available.

Cut ⌐534⌐	Flash ⌐535⌐	Type ⌐535⌐	
Fade ⌐535⌐	Wipe ⌐535⌐		

8.30.1 Standard Move limitations

A Clarity system unit can only render a finite number of characters within Standard Moves. If the Clarity system unit runs low on system resources when trying to render Standard Move animations whilst online, this will be characterised by missing frames of animation and/or missing characters. The limit is difficult to predict and may be improved by one or more of the following:

• Reduce the number of elements in the animation, or split the animation into separate animation moves which follow in sequence.

8.30.2 Descriptions

8.30.2.1 Cut

Cuts the characters/logos or graphics using a vertical interval switch operation.

8.30.2.2 Fade

Fades the characters/logos or graphics from transparent to opaque.

8.30.2.3 Flash

Animates characters/logos or graphics as a flash. The style of the flash i.e. how the effect translates between being visible and non-visible, can be configured to Cut or Fade 574. The effect can be configured to End On Screen 575 and Start On Screen 577. The Flash Rate 580 can be configured in flashes per second.

8.30.2.4 Type

Animates characters/logos on or off the screen by character or word. The effect is also known by the name 'zip' or 'pop'. The style of the type i.e. how the effect translates between being visible and non-visible, can be configured to Cut or Fade 574. The rate at which the character or words are typed can be configured using the Type Rate 582 parameter and spaces can be included in the effect using the Include Spaces 575 parameter.

8.30.2.5 Wipe

Animates characters/logos or graphics onto or off the screen using a wipe style. Use the Softness 581 parameter to define the extent of the soft edge into which text or graphics will wipe. Use the Direction 579 parameter to determine the direction of the motion.

8.31   Subtitling [CLARITY]

A subtitle file to be imported into a series of text pages, which can then be played out under the control of an edit controller (Clarity only). A subtitle file can be imported into a foreground text page. This need not be the first page in the job, but in most cases it is best to start with an empty job. The background for the page is not relevant to the eventual playout of the subtitles, but it may be useful to have a suitable background over which to preview the subtitles.

8.31.1   Simple guide to subtitling

The following is a quick overview of how subtitle files can be used. To use a subtitling file:

1. Create an example box over which the subtitles will be rendered using a rectangle shape.
2. Create a text page.
3. Choose the font and text style to be used for the subtitles.
4. Select Subtitle from the page mode drop-down list box on the Job/Page toolbar 248 and then import the subtitle file into the text page.
5. Subsequent pages, each containing a single text page, will be created automatically for every new subtitle string that is encountered within the EBU or ASCII file.
6. Make any changes to the text as required by editing each subtitle as a page of text in the normal way.
7. Adjust the timecodes for each subtitle as required using the Page List 252.
8. Go online using the Playout Controls control box 343 and put Clarity under the control of an edit-controller.

NOTE

Additionally, just the timecodes from an ASCII subtitle file can be imported into a job without creating text pages on every subsequent page.

8.31.2 Subtitling formats

You can only import subtitle files which have been written in one of two formats:

Format	Description
EBU Subtitling Data Exchange Format	Comply with EBU technical bulletin 3264. These files contain both timecode and text information and may in some cases have teletext control codes as well. EBU subtitle files have the file extension '.STL'. For more information on the EBU subtitle format, refer to EBU Technical Statement D69-1997 Subtitling data exchange format.
ASCII Text Subtitle File format 536	Contain timecodes and text and may also contain embedded commands. Text subtitle files can have the extensions '.TSF' (text subtitle file) or '.DAS'.

8.31.2.1 ASCII subtitle format (.TSF; .DAS)

ASCII text subtitle files do not have a rigid format, but do follow some simple rules:

- The subtitle text for a page starts after a line that contains two timecodes and finishes before the next blank line.
- Timecodes are specified in the standard format of HH:MM:SS:FF and either colons ':' or full stops '.' can be used as separators.
- The line that contains the timecodes can have any number of characters before, between or after the timecodes.
- The first of the timecodes is the time when the page will be displayed, the second the time when it will be blanked.
- The software expects an ASCII text subtitle file to have the extension .TSF.

The following is an example .TSF file:

```
Date : 30/8/96            All text before a line with 2 timecodes is ignored so
Name : Test file          the file can start with any amount of comments:

                          The next line contains the timecodes for the first page:
10:00:10:20 10:00:25:12   Page 1 start and stop timecodes
This is subtitle line 1   Subtitles for the first page
This is subtitle line 2

                          This blank line marks the end of the first page so
Comments can go here      until the next set of timecodes all text is ignored.

10:00:30:00 10:00:45:10   Timecodes for the second page
This is subtitle line 1   Subtitles for second page
                          This blank line marks the end of the second page.
```

Within an ASCII text subtitle file, it is possible to embed commands for changing text styles and creating blank lines. This allows any of the text styles A to Z to be selected for use with different parts of the subtitle file.

The style command is entered into the text file as an escape sequence of 4 characters '[Sx]'.where 'x' is the style letter A to Z. The blank line command is entered into the text file as an escape sequence of 4 characters '[Bx]'.where 'x' is the number of blank lines.

These commands are case insensitive and can be inserted anywhere within the subtitle text.

Escape sequences should not be added to lines containing comments or timecodes.

8.31.2.2 ASCII subtitle code pages

When text is saved as ASCII text, each character is mapped to one of 255 numbers. Because there are more than 255 characters required for writing all languages, the way in which characters are mapped will depend on the language which is being used and also the type of computer being used.

For a word processor running on a MAC, ASCII text will either be exported as MAC character codes or as ANSI codes, depending on the software being used.

For a word processor running on a PC, ASCII text will be exported either as ANSI character codes or as one of a number of code pages. Currently, Clarity/Collette supports ASCII text in the following code pages: Chinese (Traditional) BIG5, Japanese (JIS), Korean, Simplified Chinese, Unicode, Unicode (B-Endian), UTF-7 and UTF-8.

ANSI codes will be used if a file is saved as text only from within a Windows application. One of the other formats will be used if a file is saved as DOS text from an application. To find out which DOS code page is being used, type chcp at the DOS prompt.

8.31.2.3   Creating an ASCII subtitle file

ASCII subtitle files can be created in any text editor, such as Notepad. The files should be saved with the extension .TSF rather than the default .TXT.

ASCII subtitle files contain a series of subtitle blocks. The most basic block is single line containing two timecodes in the form HH:MM:SS:FF. The first is the in-time for the subtitle, and the second is the out-time. A block may optionally include a page tag of the form [PAGE N] (where N is the page number). This specifies the job page that the subtitle should be applied to. The [PAGE N] tag must go on the line immediately before the timecodes for the subtitle block it belongs to.

If no page number is specified for the subtitle block, the timecodes and any text will be applied to the job pages in sequence, adding new pages as required.

Any text for the subtitle block must start on the line immediately after the timecodes. It may continue over any number of lines, but you cannot leave blank lines in between. The first blank line after the timecodes marks the end of the block, and any text between it and the start of the next block will be treated as comments. If a page number is specified for a subtitle block, that pair of timecodes, and any associated text will only be applied to the specified page. If that page does not exist in the job, the subtitle block will be skipped and the user notified at the end of the import.

Just timecodes

These timecodes will be added to the job pages sequentially.

```
00:00:00:00 00:00:00:08

00:29:10:23 00:29:15:13

00:29:15:17 00:29:22:15

00:29:25:15 00:29:32:13
```

Timecodes with page numbers

These timecodes will be added to the specified page if it exists, or not at all.

```
[PAGE2]
00:00:00:00 00:00:00:08

[PAGE4]
00:29:10:23 00:29:15:13

[PAGE7]
00:29:15:17 00:29:22:15

[PAGE10]
00:29:25:15 00:29:32:13
```

Timecodes with page numbers and text

These timecodes and their associated text will be added to the specified pages if they exist.

```
[PAGE2]
00:00:00:00 00:00:00:08
Text to go on page 2.

[PAGE4]
00:29:10:23 00:29:15:13
Text to go on page 4.

[PAGE7]
00:29:15:17 00:29:22:15
Text to go on page 7.

[PAGE10]
00:29:25:15 00:29:32:13
```

```
Text to go on page 10.
```

8.32   System monitoring

8.32.1   SNMP [CLARITY]

8.32.1.1   SNMP monitoring

Since it was developed in 1988, the Simple Network Management Protocol (SNMP) has become the de facto standard for inter-network management.
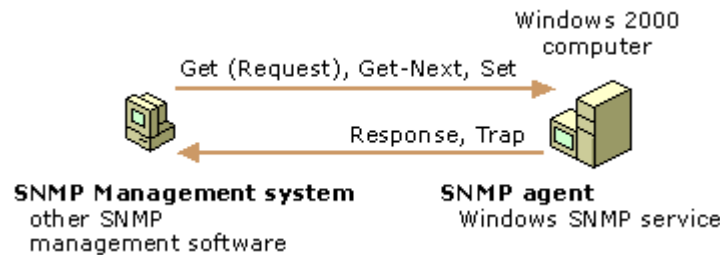
The network management system contains two primary elements: a manager and agents. The manager is the console through which the network administrator performs network management functions.

Any computer running SNMP management software is an SNMP management system. The management software application does not need to run on the same host as the SNMP agent. Third-party software can be purchased to provide this management capability.

Agents are the entities that interface to the actual device being managed. Bridges, Hubs, Routers or network servers are examples of managed devices that contain managed objects and a Clarity system unit can also be included in this list.

The SNMP management system requests information from a managed computer (agent). Managed objects on an agent can be hardware, configuration parameters, performance statistics, and so on, that directly relate to the current operation of the device in question. These objects are arranged in what is known as a virtual information database, called a management information base or MIB. SNMP allows managers and agents to communicate for the purpose of accessing these objects.

In general, agents do not originate messages, but only respond to them. A trap message is the only agent-initiated SNMP communication. A trap is an alarm-triggering event on an agent, such as a system reboot or illegal access, which provides enhanced security.

Third-party software can be purchased to provide this management capability. The functionality provided on the SNMP dialog tab 729 only enables a Clarity system unit to act as an agent and to trap alerts from an explicit Hostname or IP address. Customisation of the SMNP services and the ability to turn the services on/off is available via the Local Preferences dialog box 696. To display the User Preferences dialog box, select Options> 429 Local Preferences 430.

SEE ALSO

8.32.1.2   Location of the Clarity .MIB file on Clarity system units

Information about Clarity hardware objects needs to be compiled into the main management information base (.MIB) on the manager system. This information is stored in Clarity's own .MIB file on every system unit.

Clarity System	Filename	Default location
2	Clarity.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver
100	Clarity100.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver

Clarity System	Filename	Default location
200	Clarity200.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver
300	Clarity300.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver
500	Clarity500.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver
5000	Clarity5000.mib	C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Driver

SEE ALSO

SNMP dialog tab [729]
SNMP monitoring [538]

8.33 Text

8.33.1 ASCII Import

The Text> [408] ASCII Import [418] command enables an ASCII text file generated on a computer to be imported into a text page. When a valid ASCII text file is selected for import into a text page, the software reads the file into the page and if any Pixel Power embedded commands are encountered, they are acted upon accordingly.

SEE ALSO

Importing an ASCII text file [539]
Code pages [540]
Page breaks [540]
Embedded commands [540]
Example [541]

8.33.1.1 Importing an ASCII text file

To import an ASCII text file into a text page, follow the steps below:

1. Select the font, size, colour and other attributes required for the imported text. Position the cursor at the required insertion point within the text page.
2. Select Text> [408] ASCII Import [418]. The ASCII Import [585] dialog box is displayed.
3. If you know the exact location of the file, type the drive, directory path and filename in the Filename text box. If you want to browse for the file, select the browse button.
   The Open dialog box appears where you can browse and select the desired file. To display files of all types, select All Files from the Files of Type drop-down list box. Select Open to select the desired file. You are returned to the ASCII Import dialog box.
4. Select the Plain Text [586] option to specify that the text file does not contain encoded text.
5. Select Encoded Text [586] option to specify that the text file contains encoded text. Select the correct code page from the list available.
6. Use the Page Break Character text box [586] to specify the ASCII character will define a page break in the imported ASCII file.
7. Select Open to import the selected ASCII text file

The selected file will be read and the characters added to the text page as if they had been typed from the keyboard (i.e. with the current font style). No checks are made as to whether the file is an ASCII file; unrecognised character codes will be ignored.

When a page break character is detected, the page number will be incremented and the imported text will be added to any existing text page element on the new page number. If a subsequent, existing page does not contain a text page, the CG Tools software will create one.

If the number of pages specified by page break characters in the ASCII text file exceeds the number of pages in current the job, subsequent pages will be created, each containing a single text page into which the relevant ASCII text will be imported.

8.33.1.2 Code pages

When text is saved as ASCII text, each character is mapped to one of 255 numbers. Because there are more than 255 characters required for writing all languages, the way in which characters are mapped will depend on the language which is being used and also the type of computer being used.

For a word processor running on a MAC, ASCII text will either be exported as MAC character codes or as ANSI codes, depending on the software being used.

For a word processor running on a PC, ASCII text will be exported either as ANSI character codes or as one of a number of code pages. Currently, Clarity/Collette supports ASCII text in the following code pages: Chinese (Traditional) BIG5, Japanese (JIS), Korean, Simplified Chinese, Unicode, Unicode (B-Endian), UTF-7 and UTF-8.

ANSI codes will be used if a file is saved as text only from within a Windows application. One of the other formats will be used if a file is saved as DOS text from an application. To find out which DOS code page is being used, type chcp at the DOS prompt.

8.33.1.3 Page breaks

The default page break character is #. There are some word processors which, when saving as ASCII text, throw away the new page information and do not insert any page break characters. If this happens, it is possible to insert your own page breaks into the file.

For example, the '#' character could be placed at the end of each page of the document before saving it as an ASCII text file. Then by telling Clarity/Collette to use the '#' character as the page break character, with code 35, the text should be imported correctly onto multiple pages.

8.33.1.4 Embedded commands

Within an ASCII file, it is possible to embed commands for changing text styles, enabling any of the text styles A to Z to be selected for use with different parts of the ASCII text file. Some commands are also available for filling in template jobs (see Page template field update commands 476). All of the embedded commands are entered as escape sequences enclosed in matching square brackets `[embed]`. They can be inserted anywhere within the text file. See Example 541 for more information.

The available embedded commands are as follows:

Command	Parameters	Value	Required	Description
`[Pn]`				Goto page number.
		n	■	*Page Number*
`[Fn]`				Goto field number.
		n	■	*Field number.*
`[CxTy]`				Copy template with background.
		x	■	*Page to be copied.*
		y	■	*Template page to be used.*
	Example			
	`[C101T2]`			
	Copy page 101 using template page 2.			
`[E]`				Move cursor to end of page.
`[H]`				Move cursor to start of page.
`[Bx]`				Insert a blank line.
		x	OPT	*Number of lines.*
`[SA]` through `[SZ]` `[sa]` through `[sb]`				Change to user defined style A-Z or a-z.
	Example			
	`[F4]Field [SA]four`			

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   540

Copyright © 2000-2006 Pixel Power Ltd.

Command	Parameters	Value	Required	Description
				Fill field 4 with "Field", then apply user defined style A, then complete field with "four".
[LOGO:]				Indicates insertion of logo.
	FILENAME	name	■	Filename of logo to insert.
	FIXEDSIZE		OPT	Logo size.
		0		*Size of style.*
		1		*Size of logo image (default).*
	FILLOPTION		OPT	Logo fill type.
		0		*Solid (default).*
		1		*Cutout.*
		2		*Matte fill.*
	HEIGHT	n pixels	OPT	Height to use instead of style height (optional).
	Example			
	[LOGO:FILENAME=C:\Blah\Blah.ppi,FIXEDSIZE=0,HEIGHT=100]			
[CEL:]				Indicates insertion of cel animation.
	FILENAME		■	Filename of cel animation to insert.
	PLAYMODE		OPT	Play mode of cel animation.
		0		*One shot.*
		1		*Loop.*
		2		*Ping pong.*
		3		*Reverse one shot.*
		4		*Reverse loop.*
		5		*Reverse ping pong.*
	STARTDELAY	n frames	OPT	Number of frames delay before the cel starts (default is 0).
	DURATION	n frames	OPT	Number of frames the cel will play for (default is 0 meaning natural duration).
	Example			
	[CEL:FILENAME=C:\Blah\Blah.ppc,PLAYMODE=1]			

All commands are case insensitive. If a left bracket is required within the text file, it should be doubled up to prevent it being interpreted as part of an escape sequence. To enter a left bracket, enter the character pair '[['. A carriage return must be entered prior to the insertion of the [Fn] command if it follows an existing [Fn] command on the same line. Inserting unnecessary carriage returns may cause corruption of a template job.

NOTE

CG Tools software will import all characters up to the next embedded command. This includes carriage returns, spaces etc.

8.33.1.5   Example

The following is an example ASCII file containing embedded commands used to fill in a template job:

ASCII Text	Description
[#ASCII import test]	*Title of file (commented out).*
[#Fill Fields On Multiple Text Pages]	*Subtitle of file (commented out).*
[C101T2][P101]	*Create page 101 using template page 2 and then goto page 101.*

`[LOGO:FILENAME=C:\Stills\PAL\0306.ppi,FIXEDSIZE=0]`	*Insert logo 306.ppi and size using the character height of the current text style.*
`[F1]Text Page Number 1`	*Fill field 1 with "Text Page Number 1".*
`[F2]Text Page` `[LOGO:FILENAME=C:\Stills\PAL\1000.ppi,FIXEDSIZE=0] Number 2`	*Fill field 2 with "Text Page", then insert logo 100.ppi using the character height of the current text style, then complete field with "Number 2".*
`[F4]0018`	*Fill field 4 with still 0018. Field 4 is assigned to a cutout using the Automation (Auto.) control tab [270].*
`[F3]Text Page Number 3`	*Fill field 3 with "Text Page Number 3".*
`[C100T1][P100]`	*Create page 100 using template page 1 and then goto to page 100.*
`[#Fill In Page 100]`	*Description of next action (commented out).*
`[F4]Field [SA]four`	*Fill field 4 with "Field", then apply user defined style A, then complete field with "four".*
`[F3]Field [SB]three`	*Fill field 3 with "Field", then apply user defined style B, then complete field with "three".*
`[F2]Field [SC]two`	*Fill field 2 with "Field", then apply user defined style C, then complete field with "two".*
`[F1]Field [SD]one`	*Fill field 1 with "Field", then apply user defined style D, then complete field with "one".*
`[E]Additional Text`	*Move cursor to end of page, then write "Additional Text".*
`[B2]More Text[SA]After Blank[SB]`	*Insert two blank lines, then write "More Text", then apply user defined style A and write "After Blank", then revert to user defined style B.*
`[SZ]1`	*Apply user defined style Z, then write "1".*
`2`	*Write "2".*
`3`	*Write "3".*

8.33.2   Available text objects

Text can be placed onto a page in a variety of formats. With a page open for editing in the Graphic Edit window [260], select the Text [408] menu and then select a command from the following:

Line [410]	Draw a single line of text.
Spline [410]	Draw a line of text along a spline curve.
Page [410]	Draw a complete page of text.

A text line, spline or page can be:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   542

Copyright © 2000-2006 Pixel Power Ltd.

- drawn on either the foreground or background layer of a selected page;
- edited using the text cursor;
- formatted using the complete range of graphic and text formatting tools.

Clocks are the other text based graphic objects available. With a page open for editing in the Graphic Edit window, select the Graphics ⌐395⌐ menu. Select Clocks and then select a command from the following:

Digital Clock ⌐403⌐	Draw a digital clock.
Date Clock ⌐403⌐	Draw a date clock.

A digital or date clock can be:

- drawn only on the foreground layer of a selected page;
- formatted using the complete range of graphic and text formatting tools.

NOTE

Is important to note that digital clocks formatted as Internal cannot be navigated using the text cursor as they continually polled using the systems' internal clock.

8.33.3   Capitalisation

The Text> ⌐408⌐ Capitalise ⌐415⌐ command can be used change the case of a selected block of text (character, word, line, marked block or page). Select the Capitalise command to cycle through the case change variations available:

- select Capitalise once to convert to upper case;
- select Capitalise twice to convert to lower case;
- select Capitalise three times to convert the first letter of each line to upper case and the other letters to lower case (a line is defined as starting with a carriage return, page marker or tab character);
- select Capitalise four times to convert the first letter of each word to upper case and the other letters to lower case.

The case change will not affect any other aspect of the text (except character spacing and justification).

8.33.4   Formatting characters (spaces, tab markers and carriage returns)

The display of text formatting characters can be toggled using the Text> ⌐408⌐ Markers>Show Formatting Characters ⌐412⌐ command. Displaying formatting characters will enable you to ensure that character formatting is correct and that there are no unnecessary characters present within a selected text element.
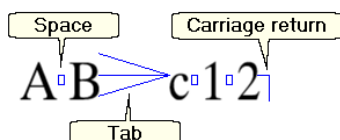
8.33.5   Inserting characters and logos

Normal characters can be typed directly from whatever language keyboard is connected. New characters always appear at the cursor position; they will insert before or overwrite existing characters, depending on the state of the insert/overtype mode ⌐544⌐. There are a number of methods to delete characters ⌐544⌐ and symbols/special characters ⌐544⌐ can also be inserted.

8.33.5.1 Insert and overtype mode

Characters can be entered into text in either insert or overtype mode. In insert mode, characters are inserted between existing characters. In overtype mode, characters are entered over the top of any existing characters.

To toggle between insert and overtype mode, press the Insert key.

While editing text, the current insert mode is displayed at the left of the Status bar |249|. When overtype mode is selected, OVR is shown.

8.33.5.2 Deleting characters

To delete a single character, follow one of the steps below:

- Press the backspace key on the keyboard to remove the character to the left of the cursor.
- Press the Delete key on the keyboard to delete the character at the cursor position.

To delete a selected block of text, follow the steps below:

- Press the backspace or Delete key on the keyboard to remove the marked block of text.

8.33.5.3 Inserting symbols and special characters

Whilst editing a text line, spline or page in Text |483| edit mode, any character to be selected from the current font, including those not directly available from the keyboard such as diphthongs and accented characters. The font referenced when inserting symbols or special characters defaults to the current text font, but from within a text page, the font can be changed to a dedicated symbol font if one is available. Symbol fonts provide a ready source of Greek letters, Dingbats and mathematical symbols.

To insert a symbol character into a text line, spline or page, follow the steps below:

1. When editing a text page, select a specific font if desired.
2. Select Text> |408|Insert Symbol |417|. The Insert Symbol dialog box |675| is displayed.
3. Use the scroll bar if available or the arrow keys to view the list of symbol characters available with the selected font.
4. To insert a single symbol character, highlight the symbol character in the Character Selection Map |675| using the arrow keys or mouse, then select OK.

The selected symbol character will be inserted in the text at the cursor position, exactly as if they had been typed on the keyboard.

8.33.6 Navigating within text elements using the text cursor

The text cursor only becomes available for use after the selection of Text |483| edit mode. The text cursor appears at the beginning of the selected text element.

Using the Cursor keys

- The LEFT and RIGHT cursor keys can be used to move around a text line, text spline or digital clock (all except Internal). The LEFT, RIGHT, UP and DOWN cursor keys on the keyboard can be used to move around a text page.
- The CTRL + LEFT/RIGHT cursor key combination can also be used to move around word-by-word.

Using the HOME key

- From within a text line, text spline, text page or digital clock (all except Internal), the HOME key can be used to move the text cursor right back to the start of the current line.
- From within a text page, the CTRL + HOME key combination can be used to move the text cursor right back to the start of the text page.

Using the END key

- From within a text line, text spline, text page or digital clock (all except Internal), the END key can be used to move the text cursor to the end of the current line.

- From within a text page, the CTRL+ END key combination can be used to move the text cursor to the end of the text page.

Using the PGDN and PGUP keys

From within a text page, the PGDN and PGUP keys can be used to move the text cursor up or down through a text page that extends beyond the viewable area of the Graphic Edit window 260.

Using the mouse

From within a text line, text spline, text page or digital clock (all except Internal), the mouse can be used to move directly to a character.

1. Move the cursor over the centre of the required character.
2. Click to place the text cursor.

8.33.7 Selecting text within text elements

Text can be selected within a text line, spline or page using by dragging the text cursor using the mouse or by using the cursor, HOME, END, PGUP and PGDN keys together with the left SHIFT and CTRL keys. Many of the text editing features operate on a selected region or block of text. When a block is marked, the text cursor shows the selected area and only certain editing operations can be performed.

Using the text cursor together with the mouse

The text cursor can be used in conjunction with the mouse to select a character or range of characters within a text element.

Action	Action	Line	Spline	Page
Click + hold then move text cursor left or right	Select text by character.	■	■	■

Using the cursor, HOME, END, PGUP, PGDN, left SHIFT and CTRL keys

In common with most Microsoft Windows word processing applications, the cursor, HOME, END, PGUP, PGDN, keys on the keyboard can be used together with the left SHIFT and CTRL keys to select blocks of text within a selected text element.

Key		Action	Line	Spline	Page
Left SHIFT +	LEFT/RIGHT	Select text by character.	■	■	■
	UP/DOWN	Select text up to the adjacent vertical text cursor position on the next line.			■
	HOME/END	Select text up to the end or start of a line.	■	■	■
	PGUP/PGDN	Select text up to the end or start of a text page.			■
Left CTRL + Left SHIFT + LEFT/RIGHT cursor keys		Select text by word.	■	■	■

Using the RapidAction Version 1 Word, Line and Page keys

The Word, Line and Page keys on the RapidAction Version 1 keyboard 179 numeric keypad 193 can be used to select blocks of text within a selected text element.

Key	Action	Line	Spline	Page
Word	Toggle selection of word containing text cursor. Applies to text lines, text splines and text pages.	■	■	■
Line	Toggle selection of line containing text cursor. Applies to text lines, text splines and text pages.	■	■	■
Page	Toggle selection of entire text object containing text cursor. Applies to text lines (selects entire line), text splines (selects entire line) and text pages (selects entire page).	■	■	■

8.33.8　Spelling

Spell checking is available for text pages, lines and splines. Text is checked against a single default dictionary that is supplied with the software. The dictionary is supplied in standard Windows text file format (.TXT). Whilst spell checking, new words can be added to the default dictionary. ASCII text can also be copied into the default dictionary text file to increase the number of words available when spell checking.

8.33.8.1　Importing new words into a dictionary

You can copy ASCII words from your own custom dictionary that you have built-up using other applications such as a word processor. Follow the steps below:

1.　Using Windows NT/2000 Explorer, browse to the location where the CG Tools software is installed e.g.

　　　C:\Program Files\Pixel Power Ltd\CG Tools 7.1\

2.　Locate the DICTIONARY.TXT file in the Defaults folder and make a copy of this file.
3.　Open the original DICTIONARY.TXT file.
4.　Open your own custom dictionary file. Words must be ASCII text format.
5.　Select and copy the words that you want to import.
6.　Paste the copied words at the end of the file.
7.　Save the DICTIONARY.TXT file to include you additional words.

NOTE

Words in the ASCII file should be separated by white space, punctuation or new lines. Duplicate words do not cause a problem. The dictionary is not case sensitive.

8.33.8.2　Checking text

Spell checking enables you to check a whole job, the current page or the selected text element (text line, spline or page).

To start spell checking, follow the steps below:

1.　Select Edit> [384] Spell Check to display the Spell Check sub-menu.
2.　From the Spell Check sub-menu, select a command from the following:

Command	Action
Spell Check Entire Job [387]	Check the spelling of an entire job.
Spell Check Page [387]	Check the spelling on the current page.
Spell Check Element [387]	Correct the spelling of the selected text element or element containing the text cursor.

After selecting a command, the software will begin scanning for misspelled words. If a misspelled or unknown word is found, the Spell Check dialog box [802] is displayed and the word will be selected and displayed at the top of the Spell Check dialog box.

At this point you have four options. Select an option from the following:

Option	Action
Change [802]	Correct the misspelled word and continue checking.
Add [802]	Add the word to the default dictionary and continue checking.
Ignore [802]	Ignore the misspelled word and continue checking.
Ignore All [802]	Ignore all occurrences of this word and continue checking.

The software will also attempt to find a correction for the word in the dictionary and display it in the Change To text box [802].

To abort spell checking, select Cancel to close the Spell Check dialog box [802].

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　　546

Copyright © 2000-2006 Pixel Power Ltd.

8.33.9   Text typing direction

It is possible to enter text into a text line, spline or page, from left to right, right to left, top to bottom or bottom to top. The default typing direction is always set to Left to Right Across Page, irrelevant of the language being used.

Whilst a text element is being edited in either Size and Move⌐482⌐ or Text⌐483⌐ edit mode, the default typing direction commands can be displayed by selecting Text⌐408⌐▷Typing Direction. The top to bottom typing direction is designed for use with the Chinese and Japanese languages and is assumed to start from the top right hand corner of the page. The software will automatically rotate Chinese or Japanese characters as required.

8.33.10   Word wrapping

Word wrapping enables a paragraph of text to be typed without worrying about where to start each new line. Carriage returns will be inserted automatically when a word extends past the right-hand margin. Word wrap will operate with text typed at the keyboard, inserted symbols, inserted logos, and imported ASCII text. Any editing of the text after it has been word wrapped will not undo the new lines created by turning word wrapping on. Word wrapping can be toggles using Text>⌐408⌐Word Wrap⌐415⌐.

8.34   Update/Revert edit mode

The software can run in one of two editing modes. With update/revert mode turned on, when the page currently open for editing in the Graphic Edit window⌐260⌐ is closed, you are prompted as to whether you want to save any changes made. With update/revert mode turned off, when the page currently open for editing in the Graphic Edit window is closed, edits are saved without prompting. The page preview in the Page Browser⌐251⌐ is updated in real-time whilst edits are made to the selected page.

To select which edit mode the software operates in, use the controls in the Edit dialog tab⌐810⌐ on the User Preferences dialog box⌐809⌐.

If the software is currently operating with edit/revert mode turned on, there are two additional settings that can be configured.

- You can ensure that the current job is saved every time you select to any save changes made to a page after the Graphic Edit window is closed (Save on update check box⌐812⌐).
- Also, when working on a single page job, it is often to required that individual pages are updated to reflect the latest changes before they are taken to air whilst online. Using this option enables an operator to work on individual pages whilst another operator is taking the job to air using a Clarity system unit (Update page before going online check box)⌐812⌐.

8.35   Video standards and aspect ratios

The CG Tools software features a number of pre-defined video standards⌐547⌐ and aspect ratios⌐548⌐ which can be applied on a job (globally) basis and on a page-by-page basis⌐549⌐.

8.35.1   Video standards

Broadcast video standards are written in many different ways. The method used in the CG Tools software and this documentation is shown below:

```
Lines per frame (nnnn) | Progressive (P), Interlaced (I) or Progressive Segmented Frame
(PSF) | Vertical refresh rate in frames or fields per second (nn)
```

The following default video standards are available for selection within the CG Tools software:

Format	Description
525	525 line (NTSC).
625	625 line (PAL).
720P-60	720 line, progressive scan @ 60 frames per second.
1080P-24	1080 line, progressive scan @ 24 frames per second.

Format	Description
1080P-25	1080 line, progressive scan @ 25 frames per second.
1080P-30	1080 line, progressive scan @ 30 frames per second.
1080I-50	1080 line, interlaced @ 50 fields per second.
1080I-60	1080 line, interlaced @ 60 fields per second.
1080PSF-24	1080 line, progressive scan, segmented frame @ 24 frames per second.
1080PSF-25	1080 line, progressive scan, segmented frame @ 25 frames per second.
1080PSF-30	1080 line, progressive scan, segmented frame @ 30 frames per second.
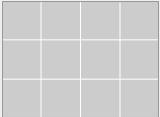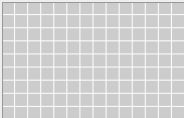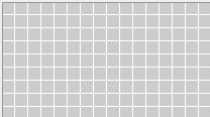
8.35.2   Aspect ratios

The term "Aspect Ratio" refers to the width of a picture (or screen) in relation to its height. Ratios are expressed in the form "width x height". For example, a 4x3 ratio means the picture is 4 units wide by 3 units high.

Note that the actual physical size of the picture is irrelevant. Aspect ratio refers only to the ratio between width and height.

In the past, nearly all TV screens were currently 4:3, i.e. four units across to three units in height, but there is a growing move towards widescreen 16:9. Pictures presented this way are believed to absorb more of our attention and have obvious advantages in certain productions, such as sport. In the change towards 16:9 some in-between ratios have been used, such as 14:9.

The following aspect ratios are available for selection within the CG Tools software:

Ratio	Image	Description
4:3 (1.33:1)		Traditional nearly square aspect ratio used for most current analog television screens. Video displays using a 4-by-3 ratio display images 4 units wide (horizontal measure) by 3 units tall (vertical measure). The 4:3 ratio performs fine for television programming, which was designed for it, but it creates problems with movie material originally designed for theater release. The movies are created with a wider, more rectangular aspect ratio (16:9 or wider) in order to create a larger viewing surface and bring the viewer more into the film. On a traditional 4-by-3 aspect ratio display, these movies must be letter boxed (where the entire image is shown with black bars above and below it) or cut down in size (pan and scan where portions of the image are cut out and not displayed resulting in an image which fills the 4:3 screen but does not contain the entire movie image as seen in the theater).
14:9 (1.55:1)		The 14:9 aspect ratio is a compromise between 4:3 and 16:9. Material that is shot 16:9 will, if possible, be converted to 14:9 for 4:3 viewing and 4:3 material will be converted to 14:9 for 16:9 viewing. It is important that material of either 4:3 or 16:9 has been produced - or in case of archive material tested for compliance - within 14:9 safe areas for both action and graphics.
16:9 (1.78:1)		Widescreen aspect ratio used for video display. The displayed image is 16 units wide (horizontal measure) by 9 units tall (vertical measure) creating a rectangular effect similar to the screen at a movie theater. It is a compromise aspect ratio situated between the nearly square 4-by-3 ratio of most current television sets and the often wider ratio used for many movies. The 16-by-9 ratio was determined to provide the best compromise eliminating the black bars for letterbox format movies (or decreasing them to thin lines for movies filmed in a wider aspect ratio) while minimizing the bars required for traditional television material recorded in the 4-by-3 ratio. The 16:9 aspect ratio is the new standard to be used for digital television broadcasts. As we progress into the digital television age, the 16:9 aspect ratio will become standard and create wider televisions that show complete movies and more movie-like television shows.
Custom		In addition to the predefined commonly used aspect ratios, the CG Tools software also enables the specification of custom aspect ratios to suit individual scenarios.

8.35.3   Video standards and aspect ratios on a page-by-page basis

Pages can be formatted with their own associated video standard and aspect ratio, different to that set globally for the job.
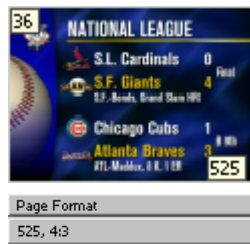
The current video standard is shown on each page preview in the Page Browser 251 and its related entry in the Page List 252.

Additionally, the aspect ratio of the page is shown in the Page List 252.

When changing the video standard and aspect ratio for selected pages, additionally, the video standard of page elements may also be changed. This operation is subject to the associated aspect ratio of the new page video standard matching that of the selected page(s) before conversion.

For example, if you convert from 625 line/16:9 aspect ratio to 525 line/16:9 aspect ratio, page elements will be converted and saved. But if you were to convert to 525 line/4:3 aspect ratio, only page sizes will be converted and not the page elements contained on those pages.

If page elements are subjected to video standard conversion, those that are linked dynamically (associated) to the job (cels, cutouts, textures, page backgrounds etc.) will be saved as new files. Existing files are never overwritten. Files with be saved in the original file location. The name of the file is appended with a numeric value to enable correct identification.

For example, if the associated cel animation `CEL.PPC` was converted, the software will interrogate the folder containing the original file and then try to name the converted file `CEL_1.PPC`. If this file already exists (because of a previous conversion), then the software will try to name the file `CEL_1.PPC`. This process is repeated until the file can be saved with a name that does not conflict.

If page elements are being converted and subsequently saved, the conversion may take some time.

NOTES

To change the video standard and aspect ratio for pages that have been edited, please ensure that the Disallow changes on a used page check box 667 is cleared on the Video dialog tab 667 on the Global Preferences dialog box 654.

SEE ALSO

Do not convert graphics on page change check box 765
Page Format dialog tab 765
Page Settings dialog box 751

8.36   Voice overs [CLARITY]

8.36.1   Voice over overview

Voice overs can be recorded easily on a page-by page basis or over a sequence of pages separated by delays and NO waits. Voice over audio clips can be recorded in either mono or stereo to an available clip store/volume. Voice over clips can be recorded and reviewed using the Voice-Over Controls dialog box 358.
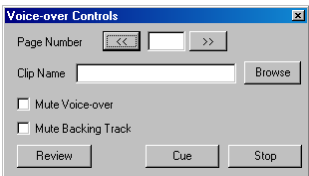
The system is inherently designed to offer a single voice over clip per page which can be in addition to a background audio clip for the same page, thus utilising the four AES/EBU audio tracks per channel if both the background audio clip and voice over are stereo. If the first page is part of a page sequence (defined a group of pages separated by delay

549   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

and NO waits), the recorded audio clip will be referenced from the first page and the following pages will have the Continued box checked 753 on the Audio dialog tab 752 on the Page Settings dialog box 751.

For more information about Clarity system audio, see System audio input and output 442. For more information about page background audio, see Page background audio 443.

When a voice over clip is recorded, by default it is implemented as track A1 for the page. Before recording voice over audio, you should configure channel source selection, AES/EBU input selection and page audio background track selection using the Voice-Over dialog tab 820 on the User Preferences dialog box 809.

If the track is stereo, you will unable to specify an additional audio clip for track A2. This leaves track A3/A4 for the background audio clip. To learn more about page background tracks, see Page background audio 443. For more configuration information on page background audio, see the Audio dialog tab 752 on the Page Settings dialog box 751.

With a stereo voice over clip on A1/A2 and a stereo background audio clip on A3/A4, you subsequently configure the audio ducking settings to duck the background audio clip level whilst the voice over clip is active. See Audio ducking 444 for more information.

By default, after selecting a page number using the Page Number controls 359 on the Voice-Over Controls dialog box 358, the file path will default to the root of the clip drive volume in the Clip Name text box 358. This will be truncated by the default filename of the clip in the form:

```
VO <JOBNAME><Pnnnnn>
```

where VO stands for voice over, <JOBNAME> is the entire job name, and <Pnnnnn> is the page number to which the voice over applies to.

Before starting recording, we recommend that you display the Audio meters 445 to monitor recording levels.

Select the Cue button to begin recording. If any additional backing track audio clips are specified on the page to which the current voice clip is associated with, you can mute the playback of these audio clip(s) by ensuring that the Mute Backing Track box 359 is checked. Recording will continue until the Stop button 359 is selected or the end of a sequence of pages is reached that are separated with no waits (the Auto-stop recording on last page box 820 must be checked on the Voice-Over dialog tab 820 on the User Preferences dialog box 809).

After an audio clip is recorded using the Voice Over Controls dialog box, you can review the audio clip in conjunction with the background audio track if present if desired (Mute Backing Track box). Use the Review button 359 to review the clip.

If you need to re-record the voice-over clip, select the Cue button again. The original voice clip is made into a temporary file and will be heard during recording, unless the Mute Voice-over box 359 is checked. Once recording is stopped, the temporary file is overwritten with the new voice over clip and inserted as a track for the page background audio.

8.36.2　Voice over audio configuration

Before attempting voice-over recording, the correct configuration of system audio routing and voice over source assignments needs to be completed. The voice over channel source selection, AES/EBU input selection and page audio background track selection is configured using the Voice-Over dialog tab 820 on the User Preferences dialog box 809.

After configuring the above to match the physical system connections, you need to configure the system internal audio routing so that the voice over audio can be monitored using the selected channels' analogue audio outputs. Audio routing is configured using the Chan A/B routing dialog sub-tab 699 on the Audio Settings dialog tag 697 of the Local Preferences dialog box 696. Learn more about audio routing X/Y sources 447 and output pairs 446.

8.37　VTR

8.37.1　Recommended VTR control, grab and/or record settings

Suggested SD VTR preroll and delay values are documented in the table below.

Machine	Grab Preroll	Grab Delay	Edit Preroll	Edit Delay

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006　　　550

Copyright © 2000-2006 Pixel Power Ltd.

(SD) Accom RTD 4224	4	3	12	8
(SD) Sony PVW2650P / 2800P	125	2	125	5
(SD) Sony 9850 High Band	125			

The above settings can be configured in the VTR Control group box 733 on the Timecode/VTR dialog tab 732 on the User Preferences dialog box 809.

Section 9

Dialog boxes
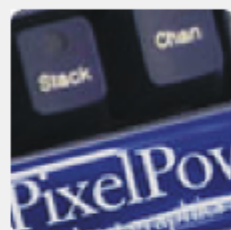
9.   Dialog boxes

Within the CG Tools software, dialog boxes and dialog tabs (if featured) enable the user to specify settings or controls that are particular to a menu command or area of software functionality. Some dialog boxes feature several tabs (dialog tabs), enabling a larger number of settings to be made available for configuration. Every dialog box featured in the CG Tools software is documented in this section. When the Help button is clicked on a dialog box or the F1 function key is pressed, help for that dialog box or dialog tab will appear. New or edited dialog boxes since the last release are highlighted with dark grey shading.

Name	Description
About dialog box [558]	Displays information about the current CG Tools software.
Adjust Roll dialog box [559]	Enables adjustment of page foreground motion speed to improve animation quality.
Add/Edit Collage Drive Mapping dialog box [560]	*To be completed at a later date.*
Add/Edit New Remote Machine dialog box [560]	Enables the specification of a new remote machine or the editing of an existing remote machine name.
Add/Edit User dialog box [560]	Enables the configuration of settings for the selected user.
Add/Import/Open/New Logo Font dialog box [564]	Enables logo font file selection and saving
Analyse Volume Results dialog box [565]	Displays a status log that was produced for the selected clip volume.
Animation Marker dialog box [565]	Enables the configuration of an animation marker that has been inserted or edited.
Apply Font Size Fix dialog box [585]	Due to a windows font bug, versions of the software prior to v 4.7.1.0 performed incorrect font height calculations for some fonts. Attempts to automatically fix the problems caused by this issue.
ASCII Import dialog box [585]	Enables importation of ASCII text.
Avid Effect Page Sequence dialog box [CLARITY PLUGIN] [586]	Displayed with the main application window of the Clarity Plugin application when the user interface is prompted to be displayed from a supported Avid product.
BMP Image Options dialog box [587]	Displayed in circumstances where you are saving Microsoft Windows Bitmap images from the CG Tools software.
Cel Animation\Video Clip Playout dialog box [CLARITY] [587]	Enables the configuration of cel animation and video clip playback settings.
Cel Conversion Tool dialog box [593]	Enables conversion to the new .CEL animation format.
Cel Field/Frame Type dialog box [594]	Enables selection of how fields or frames are stored in the cel animation before conversion.
Clarity Log In dialog box [595]	Enables a user to log in to the CG Tools software.
Clarity Log Out dialog box [596]	Enables a user to log out of the CG Tools software.
Clarity Server dialog box [596]	Enables the specification of a DNS network name (hostname) for a desired Clarity Server.
Clarity Server Job Path dialog box [597]	Enables the specification of a server job path for a desired Clarity Server.
Collage Drive Mappings dialog box [598]	Enables configuration of Collage drive mappings.
Collage Image Options dialog box [598]	Displayed in circumstances where you are saving Pixel Power Collage images from the CG Tools software.
Colour Selection dialog box [599]	Displayed in a variety of different situations where the selection of a colour is required.
Compiling Cell File dialog box [599]	Displayed after selecting OK on the Save Cel Animation dialog box [783]. It depicts the progress of individual cel frame compilation into a .CEL cel animation file.
Compression Settings dialog box [599]	Enables you to select a codec to output job playback to when playing out jobs using the Playout File Output control box [347].

9. Dialog boxes

Name	Description
Confirm Clip Replace dialog box 602	Displayed when cutting, copying and pasting clips using the Clarity Explorer 362.
Convert Cel Animation dialog box 602	Enables selection of a .PPC cel animation file for conversion to .CEL format.
Converting Page dialog box 603	Displayed after changing the page format for the page currently open in the Graphic Edit window 260 or selected pages in the Page Browser 251/Page List 252.
Convert to Shaped Video dialog box [CLARITY] 603	Enables conversion of a video clip containing key data factored into the image colour data.
Copying dialog box 604	Displayed when cutting, copying and pasting files using the Clarity Explorer 362.
Copy From dialog box 605	Enables the copying of graphic elements and settings from a selected page to the current page open in the Graphic Edit window 260.
Copy Clarity Job dialog box 605	Enables the copying of jobs with the .PPJ extension.
Create A Custom Animation dialog box 619	Enables the creation of new, named, custom animations.
Create Cel Animation From Picture dialog box 620	Enables selection of an image sequence for compilation into a cel animation (.CEL).
Destination File Already Exists dialog box [CLARITY] 620	Displayed when copying clips from a Clarity clip store to a local or network hard disk. Enables precise control over how files are written if existing files of the same name exist.
Destination Folder Already Exists dialog box [CLARITY] 621	Displayed when copying folders from a Clarity clip store to a local or network hard disk. Enables precise control over how folders are written if existing folders of the same name exist.
Drive Map dialog box 622	Enables the matching of a local drive path on the selected Clarity Server to a network accessible UNC (Universal Naming Convention).
Edit Format String dialog box 623	Enables the definition of a new digital clock or date clock format.
Edit Logo Character Glyph dialog box 626	Enables the selection of a new image (Glyph 1130) for the selected logo character in the selected logo font.
Edit Tabs dialog box 627	Enables configuration of text page tabulation.
Edit Text Margins dialog box 628	Enables configuration of text page margins.
Edit Video Format dialog box 629	Enables definition and editing of custom page video formats.
Export Cel Frames dialog box 631	Enables you to specify a folder location, image sequence name and file type for cel frames exported using the Cel Conversion Tool dialog box 593.
Export/Import Custom Animations dialog box 631	Enables the selection of a folder and any custom animation files stored within that folder for importing or exporting.
Export Page To File dialog box 633	Enables the page currently open in the Graphic Edit window 260 to be exported to a variety of differing image types.
Export Pages dialog box 635	Enables groups of pages within the current job to be exported to a variety of differing image types.
Extended Key Editor dialog box 638	Enables editing of key sequences used to perform extended key actions.
Extended Keyboard Map dialog box 639	Enables editing of selected extended keyboard file (.EKM).
Find Drive dialog box 641	Displayed on occasions when copying a Clarity job, where associated files found in the job cannot be located on drives that have already been mapped.
Freehand Painting Texture dialog box 642	Enables insertion of texture images into the Texture Buffer mimic on the Paint control tab 290 on the Graphics Tools 266.
Font Mappings dialog box 642	Enables mapping of Collage postscript and truetype fonts to Windows fonts.

Name	Description
Font Map Settings dialog box [644]	Enables editing of Collage fonts that are already mapped.
Font Warning dialog box [645]	Displayed when loading jobs that reference fonts that cannot be found on the local system.
FTP Connection Details dialog box [646]	Enables the configuration of an FTP server.
Get/Put Clip dialog box [CLARITY] [646]	Enables video and/or audio to be recorded to/from a connected VTR or recorded from a connected video feed.
Global Preferences dialog box [654]	Enables the configuration of a variety of global company wide settings for Clarity Servers within a networked workgroup.
Goto Page dialog box [668]	Enables the selection of a page to open within the Graphic Edit window [260].
Global Field Selection dialog box [669]	Enables selection of a global field from the Field Data Connection Settings control tab [281].
Grab Video dialog box [CLARITY] [669]	Enables the grabbing of video frames from a live source.
Insert/Edit Stack Control dialog box [671]	Enables the insertion and editing of page stack control entries.
Insert/Edit Stack Entry dialog box [672]	Enables the insertion and editing of page stack entries.
Insert Logo dialog box [673]	Enables the insertion and updating of text logos.
Importing Subtitles dialog box [675]	Depicts progress of a subtitle import initiated using the Subtitling dialog box [803].
Insert Symbol dialog box [675]	Enables insertion of text symbols.
Job Copy Status dialog box [675]	Monitors status of the current Clarity job copy operation.
Job List View - Display Options dialog box [677]	Enables the configuration of various display options relating both to page status and the automatic sequencing of pages.
Job Preferences dialog box [679]	Enables configuration of job based preferences.
Job Maintenance dialog box [686]	Enables the conduction of maintenance on the current job.
Job Maintenance - Applying Updates dialog box [694]	Displayed after applying any changes to locations or items using the Job Maintenance dialog box [686].
Job Properties dialog box [694]	Displays the properties of the current job.
JPEG Image Options dialog box [695]	Displayed in circumstances where you are saving JPEG images [1130] from the CG Tools software.
Local Preferences dialog box [696]	Enables the configuration of a variety of local settings for the current system.
Licence Entry dialog box [736]	Enables the entry of licence codes supplied by Pixel Power support that extend the software licence period and add additional features to the software.
Machine Name dialog box [736]	Enables the specification of a machine (PC or Clarity system) located on the local area network.
Merge Video With Key dialog box [CLARITY] [736]	Enables the merging of a video clip containing a key or alpha channel with another clip.
Missing Drive Mappings dialog box [738]	Displayed in circumstances where job paths have been added or edited and no corresponding drive mapping has been added using the Drive Maps dialog sub-tab [656] on the Clarity Server dialog tab [655] on the Global Preferences dialog box [654].
Motion Marker dialog box [739]	Enables the insertion/configuration of motion markers [514].
MXF Export dialog box [741]	Enables Pixel Power's propriety .PPV and .PPA video and audio files to be "wrapped" to a single MXF media file.
MXF Import dialog box [743]	Enables MXF media files to be converted to Pixel Power's propriety .PPV and .PPA video and audio files for subsequent use with the CG Tools software.
Open (Generic) dialog box [748]	Displayed when general file selection is required.

9. Dialog boxes

Name	Description
Open Background Picture dialog box [748]	Enables the insertion of page backgrounds.
Open Cutout Picture dialog box [749]	Enables the insertion of cutout images.
Open Glyph dialog box [749]	Enables selection of a glyph image for the selected logo font character.
Open Job dialog box [750]	Enables the opening of jobs.
Open Stack dialog box [750]	Enables the opening of page stacks.
Open Texture Picture dialog box [750]	Enables the selection of texture images to be inserted into the texture image buffer.
Open/Insert Cel Animation dialog box [751]	Enables the insertion of cel animations.
Page Settings dialog box [751]	Enables configuration of page settings for a single or group of pages.
Paste Audio Clip As dialog box [770]	Enables the selection of how an audio clip copied from a physical clip drive is pasted to a local or network location.
Paste Video Clip As dialog box [770]	Enables the selection of how a video clip copied from a Clarity clip drive is pasted to a local or network location.
Photoshop Connection Options dialog box [771]	Enables the selection of whether YUV conversion methods are used by the Pixel Power Adobe Photoshop plug-in.
Pick Server dialog box [772]	Enables the selection of an individual server from which the selected job paths can be copied to the current selected Clarity Server.
Potential Font Size Problem dialog box [773]	Due to a windows font bug, versions of the software prior to v 4.7.1.0 performed incorrect font height calculations for some fonts. Notifies in the problem has occurred.
Properties dialog boxes (Clip Explorer) [773]	Displayed when working with files within the Clarity Explorer [362].
Recompile Cel Animation From Picture dialog box [780]	Displayed when recompiling a cel animation.
Remote Connection dialog box [780]	Displayed when the CG Tools software tries to access a file on a remote system or PC via DCOM or ODBC.
Rendering Smart Moves dialog box [780]	Enables the progress monitoring of Smart Move rendering.
Save As (Generic) dialog box [781]	Displayed when general file saving is required.
Save Background Image dialog box [781]	Displayed when the saving of page backgrounds is required.
Save Clarity Job dialog box [781]	Displayed when the saving of jobs is required.
Save Cel Animation dialog box [783]	Displayed when the compilation of a cel animation is required.
Save Image Options dialog box [783]	Displayed in circumstances where you are saving Pixel Power Image (.PPI) images or Video Paint Box Format (Quantel) (.VPB) images.
Save Stack As dialog box [784]	Displayed when the saving of page stacks is required.
Save Still dialog box [784]	Displayed when the saving of stills is required.
SD Hardware Configuration [CLARITY] [SD] dialog box [786]	Enables configuration of SD hardware settings for the current system.
Select Batch Record File To Open dialog box [796]	Displayed when recording clips from a connected VTR (GET) using batch record.
Select Collage Font To Map To <font name> [796]	Displayed when mapping Collage fonts.
Select Custom Key Protect Image dialog box [797]	Enables selection of an image containing a key or matte.
Select Font dialog box [797]	Enables the selection of a new font when performing job maintenance.
Select Image dialog box [798]	Enables a stack still/image to be selected.
Select Page Paste Mode dialog box [798]	Enables page pasting options to be selected.

Name	Description
Select Windows Font For dialog box 799	Enables selection of a local Windows font during font mapping operations.
Set Playout Preview dialog box 800	Enables the selection of a user defined frame from the selected pages' playback.
Set Preview Text dialog box 801	Enables you to configure the preview text for each style preview shown in the Preview List on the User Defined Styles (Styles) (Crop Styles) control tab 298 or the Styles control tab 353 on the floating Styles/Logos control box 351.
Source/Destination Job dialog box 801	Enables a source or destination job to be selected when copying a Clarity job (.PPJ).
Spell Check dialog box 802	Enables the spell checking of text elements, pages and jobs to be conducted.
Subtitling dialog box 803	Enables page subtitling to be completed.
Supported Features dialog box 806	Enables the viewing of the current features for the current CG Tools software product.
TGA Image Options dialog box 806	Displayed in circumstances where you are saving Truevision TGA (TARGA) 1130 images.
Test Patterns dialog box [CLARITY] 806	*To be completed at a later date.*
TIFF Image Options dialog box 807	Displayed in circumstances where you are saving TIFF images 1130.
Timecode In/Out dialog box 807	Enables the editing of timecode in and out values for pages.
Unpack Job From ZIP Archive dialog box 808	Enables the unpacking of a Clarity job from a zipped job package created using the Package dialog tab 614 on the Copy Clarity Job dialog box 605.
User Preferences dialog box 809	Enables the configuration of a wide variety of user settings.
Warning: Analysis of the associated files for this job has found problems 825	Displayed when the CG Tools software has experienced problems during the loading of jobs.
Warning !! - No YUV Video Hardware dialog box 825	Displayed when the system graphics display adapter does not support YUV colour space.
YUV Conversion Settings dialog box 826	Enable conversions between RGB and YUV colours and vice-versa.

9.1   About dialog box

Displays information about the current CG Tools software. It also displays the current logged in user. Information from this dialog box may be requested by Pixel Power support to help deal with support queries. To display the About dialog box, follow the step below:

- Select Help> 434 About 435. The About dialog box is displayed. Depending on the CG Tools software product that you are running, there are two versions of this dialog box.

  This version is shown if you are running Clarity PREP (no hardware). The Software File Versions dialog box displays information about software system files on the current system.
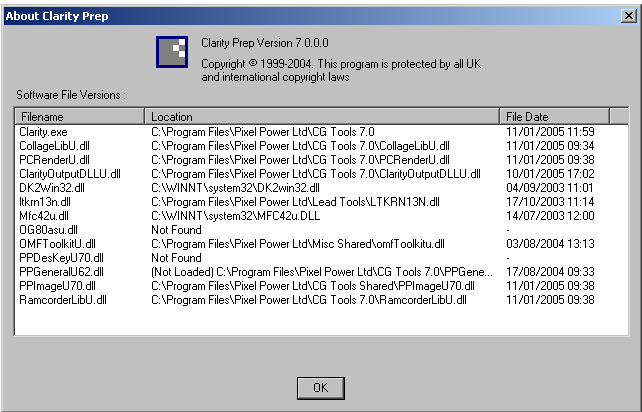
This version is shown if you are running Clarity (with hardware). It features an additional list box (Hardware File Versions), displaying information about hardware system files on the current system.
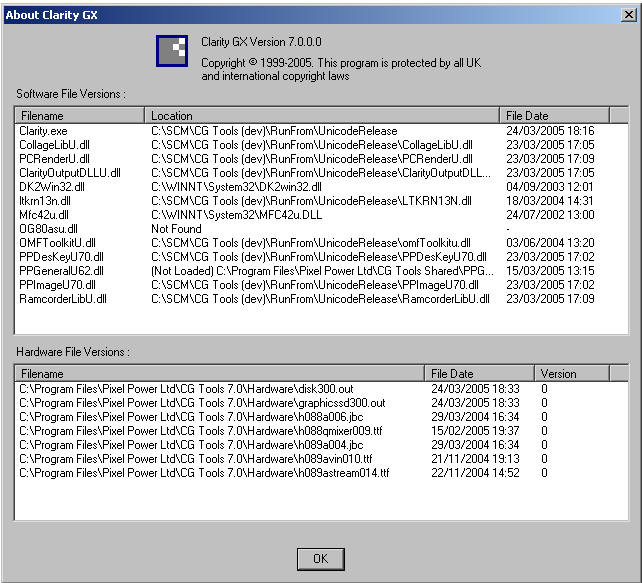
9.2 Adjust Roll dialog box

Must have a page containing a text page or other foreground element and the foreground page animation must be set to either Roll or Reverse Roll.

If pages are displayed with a foreground motion speed that is exactly (or close to) an odd number of lines per field, the perceived quality of the moving foreground display elements will be seriously reduced (especially at SD definition).

- To display the Adjust Roll dialog box foreground motion speed can be corrected, select either Text> 408 Roller Adjust Text 418 or Graphics> 395 Roller Adjust All 408 . The Adjust Roll dialog box is displayed.
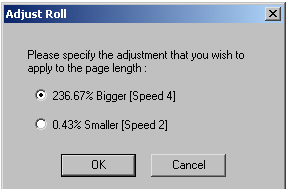
After the calculation has been made for page currently open in Graphic Edit window 260 , you are offered two choices. The first is usually a radical change in the speed of foreground motion and page length, the second a more subtle

change. Select the desired option and then select OK.

SEE ALSO

Roller adjust functionality 527

9.3 Add/Edit Collage Drive Mapping dialog box

To be completed at a later date.

```
IDD_EDITDRIVEMAPDLG
```

<PAW>

9.4 Add/Edit New Remote Machine dialog box

Enables the specification of a new remote machine or the editing of an existing remote machine name.
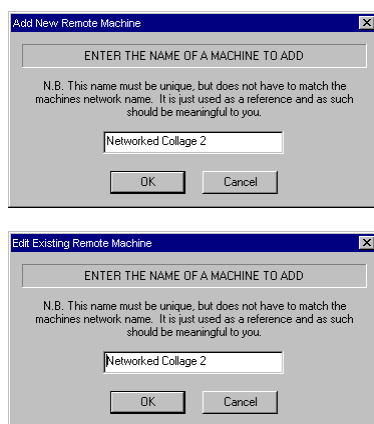
It is displayed when the Add or Edit button is selected in the Remote Collage Drives group box on the Collage Drive Mappings dialog box 598. Specify or edit the name for the machine or virtual file system in the text box, then select OK.

9.5 Add/Edit User dialog box

Enables the configuration of settings for the selected user. To display the Add User or Edit User dialog box, follow the steps below:

- Select Add 657 or Edit 657 on the Users dialog tab 665 on the Global Preferences dialog box 654. The Add User or Edit User dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
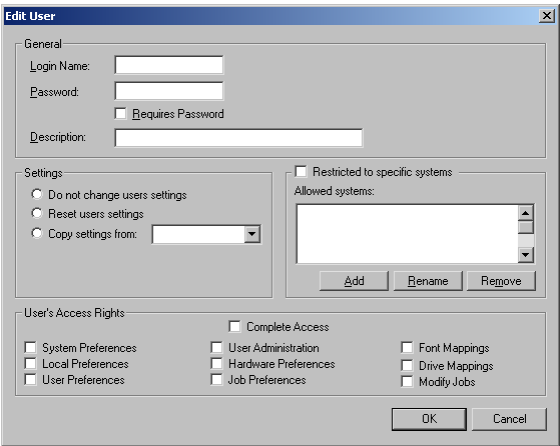
SEE ALSO

Example user management and Clarity Server workgroup configuration [139]
User management system feature reference [135]
Featured XML files, basic description and tag reference (where relevant) [166]

9.5.1 General group box

The controls in this group box enable the configuration of the selected users' login name [561], password [561], user description [562] and whether the password is required for login [562].

NOTE

The user management system can be configured to log users into the CG Tools software via their Microsoft® Windows® account login. If the Administrator has checked the Use Windows login sessions to login to Clarity on startup check box [667] in the Advanced Options group box [666] on the Users dialog tab [665] on the Global Preferences dialog box [654], when the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the `Users.xml` [172] file, then CG Tools will login transparently using that user account.

SEE ALSO

Automatic login if only a single user is specified [134]
Password encryption [137]
Using Microsoft® Windows® logins [138]

9.5.1.1 Login Name text box

Enter a new login name or edit an existing login name using the Login name text box.

NOTE

The Administrator login name is not editable.

9.5.1.2 Password text box

Enter a new password or edit an existing password using the Password text box. The password is requested during log in to a CG Tools session by the Clarity Log In dialog box [595] ONLY if the Requires Password box [562] is checked.

NOTE

Transparent login using Microsoft® Windows® logins [138] only occurs if the Requires password box [562] is cleared for that user account.

SEE ALSO

Automatic login if only a single user is specified [134]
Password encryption [137]
Using Microsoft® Windows® logins [138]

9.5.1.3 Requires Password check box

If is desirable for the password specified using the Password text box to be required by the Clarity Log In dialog box [595] when the CG Tools software is started, ensure that the Requires Password box is checked.

NOTE

Transparent login using Microsoft® Windows® logins [138] only occurs if the Requires password box is cleared for that user account.

SEE ALSO

Automatic login if only a single user is specified [134]
Password encryption [137]
Using Microsoft® Windows® logins [138]

9.5.1.4 Description text box

Edit the selected users' description that will appear in the Description column in the <users > list box [666] in the Clarity Users group box [665] on the Users dialog tab [665] on the Global Preferences dialog box [654].

9.5.2 Restricted to specific systems check box and group box

It is possible to allow specific user accounts to have access to specific Clarity Servers within a workgroup. For example, you may want to limit graphic artists to only have access to Clarity Servers that have been tasked as content creation systems (systems running the Clarity PREP software). The controls in this group box enable the addition [562], deletion [563] and renaming [563] of Clarity Servers onto which the selected user can log in to. Check the Restricted to specific systems check box to enable the maintenance of systems.

SEE ALSO

Restricting users to specific Clarity Servers [137]

9.5.2.1 Allowed systems list box

Lists the systems that the selected user can login to. The maintenance of available systems is conducted directly using this list box. You cannot browse for available systems in your workgroup; you must know the DNS name of the system that you want to add [562] or rename [563].

SEE ALSO

Restricting users to specific Clarity Servers [137]

9.5.2.2 Add button

Select the Add button to add a new system to the Allowed Systems list box [562].

SEE ALSO

Restricting users to specific Clarity Servers [137]

9.5.2.3   Rename button

Select the Rename button to rename a selected system in the Allowed Systems list box 562.

SEE ALSO

Restricting users to specific Clarity Servers 137

9.5.2.4   Remove button

Select the Remove button to remove a selected system from the Allowed Systems list box 562.

SEE ALSO

Restricting users to specific Clarity Servers 137

9.5.3   Settings group box

The controls in this group box enable users' settings to be copied 563, reset 563 and locked from being edited 563.

SEE ALSO

Maintaining user settings 137

9.5.3.1   Do not change users settings radio button

Only available when editing an existing user account.

To ensure that user settings are left unchanged, make sure that the Do not change user settings option is selected.

SEE ALSO

Maintaining user settings 137

9.5.3.2   Reset users settings radio button

To ensure that the selected users' settings are reset, thus removing any user specific options that have been set previously, and returning their settings to the CG Tools software defaults, select the Reset users settings option.

SEE ALSO

Maintaining user settings 137

9.5.3.3   Copy settings from radio button and drop-down list box

To copy settings from another user (i.e. a known good account) to the current selected user, select the Copy settings from option and then select a user account from the adjacent drop-down list box.

SEE ALSO

Maintaining user settings 137

9.5.4 User's Access Rights group box

The controls in this group box enable the configuration of what areas of CG Tools software functionality can be accessed by the selected user.

Check box	Enables access to
Complete Access	All areas of CG Tools functionality. This is the default setting.
Drive Mappings	Options> [429] Collage Import>Drive Mappings menu command.
Font Mappings	Options> [429] Collage Import>Font Mappings [432] menu command.
Hardware Preferences	Options> [429] Hardware Settings sub-menu command.
Job Preferences	Options> [429] Preferences>Job/Stack Preferences [430] command.
Local Preferences	Options> [429] Preferences>Local Preferences [430] command.
Modify Jobs	The modification of pages and saving of jobs. If this box is not checked, then the user will be restricted from menu commands and tools that are deemed to be required during job editing.
System Preferences	Options> [429] Preferences>Global Preferences [430] command.
User Administration	Manage other users accounts.
User Preferences	Options> [429] Preferences>User Preferences [430] command.

9.6 Add/Import/Open/New Logo Font dialog box

The generic Add/Import/Open/New Logo dialog box is displayed when logo font file selection and saving is required. Launched when working with logo fonts on the:

- Logo Fonts control tab [287] on the Graphic Tools [266];
- Logo Fonts control tab [352] on the floating Styles/Logos control box [351];
- Logo Fonts dialog tab [689] on the Job Maintenance dialog box [686].
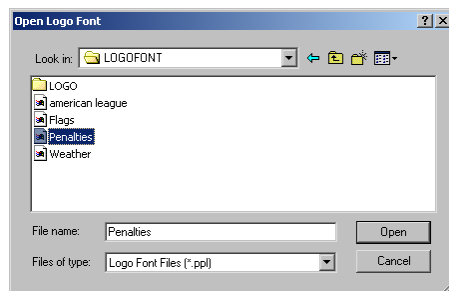
1. Browse to location where the logo font is located or where you want to create a new logo font.
2. If adding, opening or importing, select the desired logo font. If creating a new logo font, enter a name for the new logo font in the File name text box
3. Select Open to add, open or import the selected logo font or select Save to create a new logo font.

9.7 Analyse Volume Results dialog box

This dialog box is displayed when the Analyse button is selected on the Clip Store dialog tab 708 on the User Preferences dialog box 809.

It displays a status log that was produced for the selected clip volume. A .TXT log file is written to the Hardware folder in your chosen CG Tools installation folder on the local hard disk. The filename has the same name as the volume you have analysed, but is prefixed with DiskLog_ e.g. DiskLog_internal_volume1.txt.
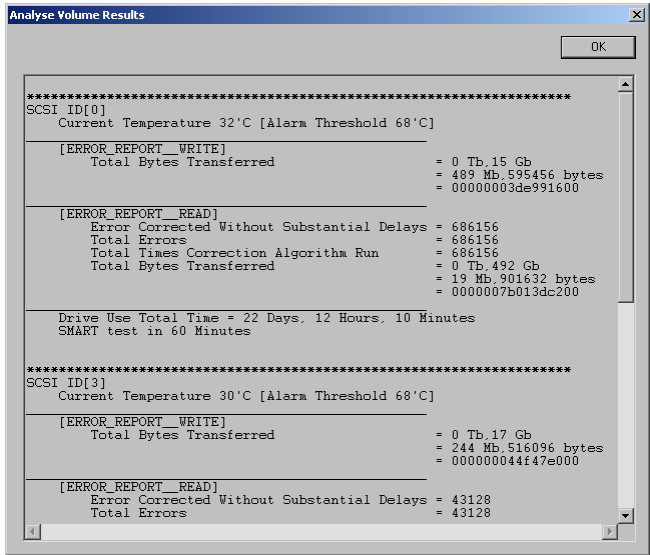
NOTES

Pixel Power support 103 may request this status log if you are experiencing problems with the volume.

9.8 Animation Marker dialog box

The Animation Marker dialog box enables the configuration of an animation marker that has been inserted or edited. To display the Animation Marker dialog box, follow the steps below:

- When working within a text page, select Text> 408 Markers>Insert>Animation 411. The Animation Marker dialog box is displayed. Alternatively, double-click on an animation marker in the current text page in the Graphic Edit window 260. When working with a graphic object other than a text page (e.g. shapes, cutouts etc.) select Graphics> 395 Animated Path 400. Alternatively, double-click on an object formatted with an animation marker in the Graphic Edit window 260.

  In both cases, the Animation Marker dialog box is displayed. The Animation Marker dialog box can be displayed in two different states, depending on how you want to work. Use the Basic/Advanced button 568 to switch the dialog box between basic and advanced states.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
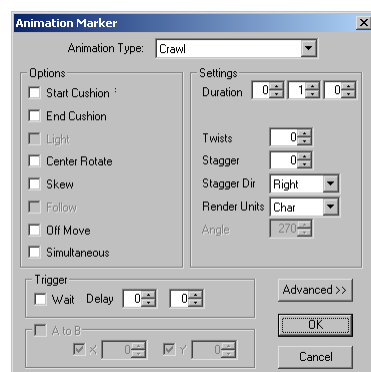
Basic   **Advanced**
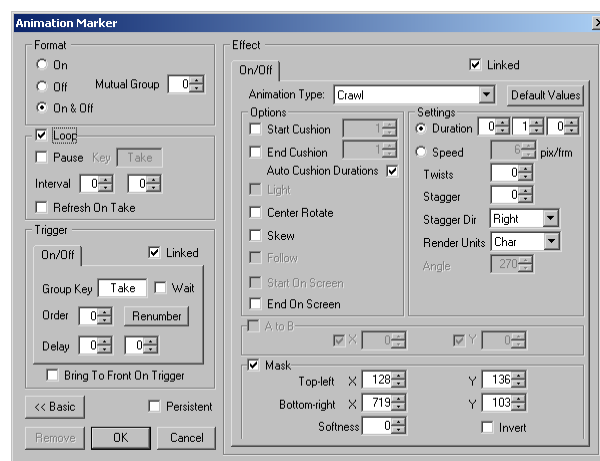
Additionally, with the Advanced state shown, if you select Custom Animation from the Animation Type drop-down list box [569], controls related to the selection of custom animations are shown in the Effect group box [569].

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

Custom Animation
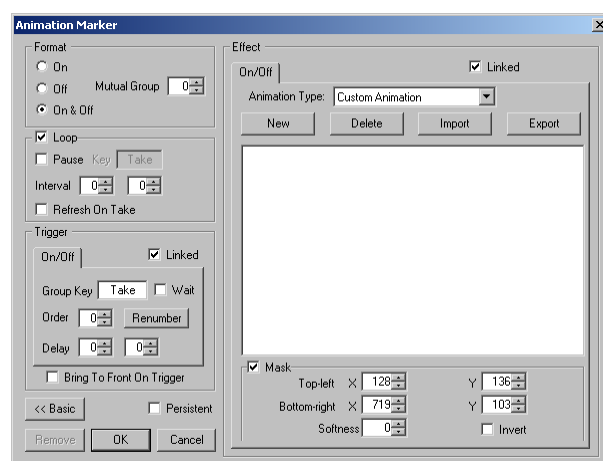
NOTES

- Some configuration parameters may not be available for some Standard Moves [534], Cool Moves [462], Smart Moves [532] or Custom Animations [465]. In some circumstances, some user interface items are replaced with others when particular animation effects are selected.
- When the animation marker is inserted, the animation effect will be applied to subsequent characters up to the next marker or end of the page, whichever comes sooner.
- Animation markers only affect a static page; if roll or crawl is chosen for the page, the animation markers will be ignored.
- If an animation marker and field marker are inserted at the same point within a text page, when the job is played out, the animation marker is interpreted first, then the field marker.

SEE ALSO

Changes to Custom Animation implementation for CG Tools version 7.1.0.6 [465]

9.8.1 <custom animation> list box

Only displayed when Custom Animation is selected from the Animation Type drop-down list box.

Lists the custom animations available to the current job/system. For information on how custom animations are stored in CG Tools versions 7.1.0.6 and later, see Changes to Custom Animation implementation for CG Tools version 7.1.0.6 |465|.

NOTE

If no custom animations are available for selection, you can create a new custom animation using the New button |573| or import animations from another location using the Import button |571|.

If you have loaded a job created in a version prior to CG Tools versions 7.1.0.6 that references custom animations stored in the previous default folder (e.g. `CG Tools 7.0\Custom Animations`), these referenced animations will not be shown in the <custom animation> list box. You must configure the job to reference the older location using the Global Custom Animations Folder group box |682| on the General dialog tab |680| on the Job Preferences dialog box |679|.

9.8.2 A to B check box and group box

The controls in this group box are NOT available when Custom Animation is selected from the Animation Type drop-down list box.

Applicable to the following Cool Move animation effects:

Continuous Ticker |462|, Crawl |462|, Croll |463|, Explode |463|, Plughole |463|, Reverse Crawl |463|, Reverse Roll |463|, Reverse Roll Bounce |463|, Roll |463|, Shred |464|, Shred Through |464|, Shuffle |464|, Spiral Horizontal |464|, Spiral Vertical |464|, Static |464|, TeleType |464|, Wave |464|

Applicable to the following Smart Move animation effects:

Explode (Smart) |533|, Fade (Smart) |533|, Focus (Smart) |533|, Perspective X/Y/XZ/YZ/XY (Smart) |533|, Pulse (Smart) |533|, Spin (Smart) |533|, Swing (Smart) |533|, Wobble (Smart) |534|, Zoom (Smart) |534|, Zoom Fade (Smart) |534|, Zoom Focus (Smart) |534|

Description

The controls in the A to B group box are available for a number of animation effects and enable a start/end point for the animation to be defined.

If the text or graphic element is being animated onto the screen, it will follow the path from the A to B point to its position as placed on the page; if the text is animated off the screen, it will travel in the reverse direction along the A to B path.

Check the A to B box to enable the X and Y check boxes and increment boxes |568|.

After applying the settings configured using the A to B group box (by selecting OK on the Animation Marker dialog box |565|), the A to B target screen position appears in the Graphic Edit window |260|, indicated by the green dotted horizontal and vertical lines.
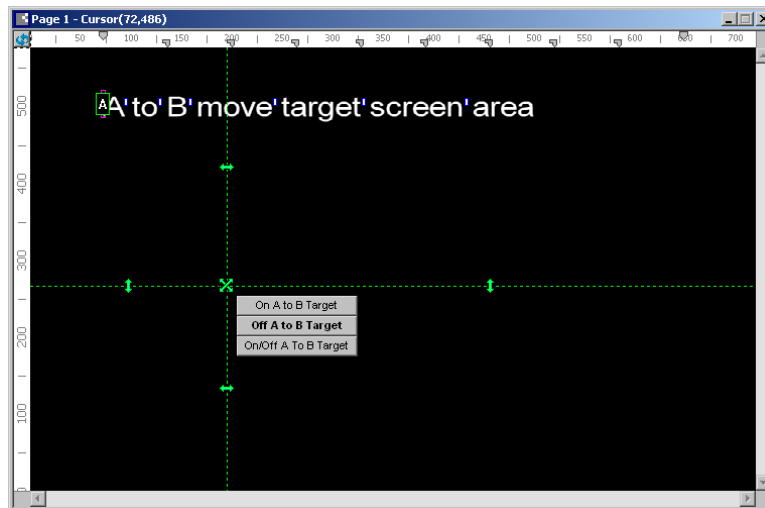
The horizontal (x) and vertical (y) lines can be manipulated independently using the arrow handles. Buttons will appear, depending on the state of the settings in the Format group box [570] and whether an A to B move has been enabled for an On, Off or On & Off animation. Select an available button to define the x and y attributes for the A to B move relating to the On, Off or On/Off animation.

If you have specified only a X component for the move using the X increment box [568], then arrow handles will only be available for the vertical (y) line, enabling you to define a position on the x axis. If you have specified only a Y component for the move using the Y increment box [568], then arrow handles will only be available for the horizontal (x) line, enabling you to define a position on the y axis. Both the horizontal (x) and vertical (y) lines can be manipulated together using the cross handle if both x and y values have been specified using the X and Y increment boxes [568].

SEE ALSO

X and Y check boxes and increment boxes [568]

9.8.2.1   X and Y check boxes and increment boxes

```
(0 to maximum x and y axis of current page format in lines/pixels)
```

To enable the specification of an x or y value, check the relevant box to enable the related increment box. In the X and Y increment boxes, type in the required position in pixels or use the increment and decrement buttons to jog the values up or down on.

9.8.3   Basic/Advanced button

Select the Basic or Advanced button to toggle the Animation Marker dialog box between the basic and advanced states [565].

9.8.4   Default Values button

The Default Values button only appears when the Animation Marker dialog box is displayed in its Advanced state (selectable using the Basic/Advanced button [568]). It enables you to populate animation parameters for the selected effect with sensible default values to ensure that the effect will playout. Once you have previewed the effect using default parameter values, you can then edit the defaults to create your desired animation.

9.8.5   Delete button

Only displayed when Custom Animation is selected from the Animation Type drop-down list box.

Select the Delete button to delete the selected custom animation from the <custom animation> list box [567], thus removing the reference to it from the current job. The related custom animation .TXT file is deleted from its saved location. Custom animations created in the current job are stored in a HIDDEN folder beneath the folder where the job

file is located, similar to the background update files also used by some jobs.

For example, if the job is located in:

```
C:\MyJobs\MyCustomJob.ppj
```

then the custom animations for that job will be stored in the following folder path:

```
C:\MyJobs\MyCustomJob\Custom Animations
```

Please make sure that you are certain that you want to delete the selected custom animation(s). If you close the Animation Marker dialog box without selecting another animation, the following message is displayed informing you that the deleted custom animation effect can be recovered from the Recycle Bin.
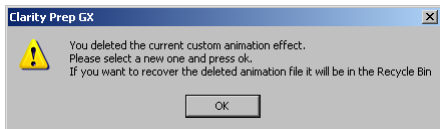
NOTE

To see HIDDEN folders beneath the folders where the job files are located, you must configure Windows to display hidden folders. This is not normally necessary as all maintenance of custom animations should be conducted using the CG Tools software.
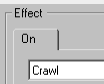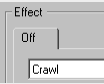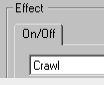
ms-its:C:\WINDOWS\Help\folderop.chm::/win_fcab_show_file_extensions.htm

9.8.6   Animation Type drop-down list box

From the Animation Type drop-down list box, select the type of animation effect that you want to insert. The default group of animations are split into groups. Those animations named with the (Smart) extension are Smart Moves [532]; those without are Cool Moves [462]. Animations are listed in alphabetical order. With the Advanced state shown [565], if you select Custom Animation from the Animation Type drop-down list box, controls related to the selection of custom animations (<custom animation> list box [567], Delete button [568], Export button [570], Import button [571] and New button [573]) are shown in the Effect group box [569] on the related tab as per selection of the options in the Format group box [570].

9.8.7   Effect group box

The Effect group box only appears when the Animation Marker dialog box is displayed in its Advanced state (selectable using the Basic/Advanced button [568]). Depending on the options selected in the Format group box [570], effect configuration controls are grouped onto tabs.

Displayed tabs	Reason
	If you have selected to animate the animation effect onto the screen (by selecting the On [571] option in the Format group box [570]), then only the On tab is shown in the Effect group box and all controls on that tab relate ONLY to the configuration of the animation ON to the screen.
	If you have selected to animate the animation effect off the screen (by selecting the Off [570] option in the Format group box [570]), then only the Off tab is shown in the Effect group box and all controls on that tab relate ONLY to the configuration of the animation OFF the screen.
	If you have selected to animate the animation effect both onto and off the screen (by selecting the On & Off [570] option in the Format group box [570]), then both the On and Off tabs are shown in the Effect group box and all controls on each tab relate ONLY to the relevant animation type.
	If you have selected to animate the animation effect both onto and off the screen (by selecting the On & Off [570] option in the Format group box [570]) and you have also checked the Linked box [571], then the On/Off tab is shown in the Effect group box and all controls on that tab relate to animation both ON and OFF the screen.

NOTE

Additionally, with the Advanced state shown, if you select Custom Animation from the Animation Type drop-down list box [569], controls related to the selection of custom animations (<custom animation> list box [567], Delete button [568],

569   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Export button 570, Import button 571 and New button 573) are shown in the Effect group box 569 on the related tab as per selection of the options in the Format group box 570.

9.8.8 Export button

Only displayed when Custom Animation is selected from the Animation Type drop-down list box.

Select the Export button to export custom animations currently known to the CG Tools software to another location (e. g. another Custom Animation folder on the current system or a location on another system. The Export Custom Animations dialog box 631 is displayed.

9.8.9 Format group box

Available to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects except the Continuous Ticker 462 Cool Move animation effect.

Description

The controls in the Format group box enable you to define whether animations are brought on 571, off 570 or on and off 570 the screen. You can also configure the animation to part of a mutual group 570 of animations.

NOTE

Control over how custom animations are actioned on and off the screen is achieved using the Timeline control box 355.

SEE ALSO

Mutually exclusive foreground animations 441
Mutual group increment box 570
Off radio button 570
On & Off radio button 570
On radio button 571

9.8.9.1 Mutual group increment box

(0 to +99)

To be completed at a later date. See Mutually exclusive foreground animations 441 for more information.

<PAW>

9.8.9.2 Off radio button

Select the Off option to format the animation effect to animate text or a graphic off the screen from its current position. Selection of this option is reflected by the appearance of the Off tab in the Effect group box 569, enabling configuration of parameters relating to the effects' animation OFF the screen.

9.8.9.3 On & Off radio button

Select the On & Off option to format the animation effect to animate text or a graphic on AND off the screen. Selection of this option is reflected by the appearance of the On & Off tab in the Effect group box 569, enabling configuration of separate parameters relating to the effects' animation on AND off the screen.

NOTE

If the Linked box 571 is checked, then the On/Off tab is displayed and all controls on that tab relate to both On and Off animation.

9.8.9.4   On radio button

Select the On option to format the animation effect to animate text or a graphic onto the screen into its current position. This is the default setting. Selection of this option is reflected by the appearance of the On tab in the Effect group box 569, enabling configuration of parameters relating to effects' animation ON to the screen.

9.8.10   Import button

Only displayed when Custom Animation is selected from the Animation Type drop-down list box.

Select the Import button to import custom animations from a location (e.g. another Custom Animation folder on the current system or a location on another system) to make them known to the job currently open in CG Tools software. The Import Custom Animations dialog box 631 is displayed.

9.8.11   Linked check box

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

If you have selected the On & Off option 570 in the Format group box, 570 to ensure that the same animation parameters are used to configure an effects' ON and OFF animation, ensure that the Linked box is checked. The On/Off tab is displayed if the Effect group box 569 and all controls on that tab relate to ON and OFF animation.

NOTE

Control over how custom animations are actioned on and off the screen is achieved using the Timeline control box 355.

9.8.12   Loop check box and group box

Available to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects except the Continuous Ticker 462 Cool Move animation effect.

Description

The controls in the Loop group box enable you to define whether the selected animation will loop and enables a pause to be defined whilst the loop is actioned. Check the Loop box to configure the current animation to loop. The controls in the Loop group box are subsequently enabled.

SEE ALSO

Interval increment boxes 571
Key text box 571
Pause check box 572
Refresh On Take check box 572

9.8.12.1   Interval increment boxes

```
(SS:FF)
(0 to 83 : 0 to 29)
```

In the Interval increment boxes, type in the required interval in SS:FF between each iteration of the animation loop cycle or use the increment and decrement buttons to jog the values up or down on.

9.8.12.2   Key text box

If the Pause box 572 is checked, enter the key in the Key text box that will action the pause during the animation loop.

571   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.8.12.3 Pause check box

To enable the animation to be paused during each loop, ensure that the Pause box is checked, then specify an action key using the Key text box. [571]

NOTE

- The term "pause" means that the animation will stop ONLY after it has reached its final on screen OR off screen position. Pressing the pause action key mid-way though an animation WILL NOT stop the animation immediately. The animation will pause until the defined action key is pressed again.
- The pause functionality is irrelevant when configured in conjunction with separate on and off triggers that are configured with waits (specified using the controls in the Trigger group box [585]).

9.8.12.4 Refresh On Take check box

To enable the animations' data to be updated to feature the latest data supplied via an associated page template field marker when the page is taken, ensure that the Refresh on take box is checked. This setting is included in the Loop group box [571] because it only applies to looping animations. Has particular relevance to countdown clocks, meaning that if you prepare a page, delay for a while and then take the page, the clocks' time will be up to date.

SEE ALSO

Creating a countdown clock effect using page template fields and scripting [1100]

9.8.13 Mask group box

The controls in this group box ARE available when Custom Animation is selected from the Animation Type drop-down list box.

Applicable to the following Cool Move animation effects:

Continuous Ticker [462], Crawl [462], Croll [463], Explode [463], Plughole [463], Reverse Crawl [463], Reverse Roll [463], Reverse Roll Bounce [463], Roll [463], Shred [464], Shred Through [464], Shuffle [464], Spiral Horizontal [464], Spiral Vertical [464], Static [464], TeleType [464], Wave [464]

Applicable to the following Smart Move animation effects:

Explode (Smart) [533], Fade (Smart) [533], Focus (Smart) [533], Perspective X/Y/XZ/YZ/XY (Smart) [533], Pulse (Smart) [533], Spin (Smart) [533], Swing (Smart) [533], Wobble (Smart) [534], Zoom (Smart) [534], Zoom Fade (Smart) [534], Zoom Focus (Smart) [534]

Description

The controls in the Mask group box enable the configuration of a masked screen area (bounding box) that will mask (or show if inverted [573]) the selected animation effect. A softness [573] effect can be applied the edge of the mask if desired. Particularly of use when creating Continuous Ticker animation effects where a portion of the effect is masked from view near to edge of the screen.

After applying the settings configured using the Mask group box (by selecting OK on the Animation Marker dialog box [565]), the mask bounding box appears in the Graphic Edit window [260] and its size and position can be subsequently edited using the mouse. Buttons will appear, depending on the state of the settings in the Format group box [570] and whether a mask has been enabled for an On, Off or On & Off animation.
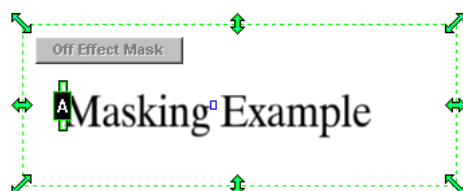
SEE ALSO

Bottom-right X and Y increment boxes [573]

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   572

Copyright © 2000-2006 Pixel Power Ltd.

9.8.13.1 Bottom-right X and Y increment boxes

`(0 to maximum x and y axis of current page format in lines/pixels)`

In the Bottom-right X and Y increment boxes, type in the required bottom-right hand corner position of the mask bounding box in pixels or use the increment and decrement buttons to jog the values up or down on.

9.8.13.2 Invert increment box

To ensure that the animation effect is to appear only outside of the masked area, check the Invert box. If the Invert box is cleared, the animation effect will appear inside the masked area.

9.8.13.3 Softness increment box

`(0 to +32 pixels)`

If desired, you can apply a softness effect to the edge of the mask. In the Softness increment box, type in the required softness in pixels or use the increment and decrement buttons to jog the values up or down on.

NOTE

Softness will extend out from the edge of the masked region.

9.8.13.4 Top-left X and Y increment boxes

`(0 to maximum x and y axis of current page format in lines/pixels)`

In the Top-left X and Y increment boxes, type in the required top-left hand corner position of the mask bounding box in pixels or use the increment and decrement buttons to jog the values up or down on.

9.8.14 New button

Only displayed when Custom Animation is selected from the Animation Type drop-down list box.

Select the New button to create a new custom animation effect. The Create A Custom Animation dialog box 619 is displayed.

9.8.15 Options group box

The controls in this group box are NOT available when Custom Animation is selected from the Animation Type drop-down list box.

The controls in the Options group box enable a wide variety of animation parameters to be configured.

SEE ALSO

9.8.15.1 Auto Cushion Durations check box

Applicable to the following Cool Move animation effects:

Continuous Ticker [462], Crawl [462], Croll [463], Explode [463], Plughole [463], Reverse Crawl [463], Reverse Roll [463], Reverse Roll Bounce [463], Roll [463], Shred [464], Spiral Horizontal [464], Spiral Vertical [464], Static [464], Wave [464]

Applicable to the following Smart Move animation effects:

Explode (Smart) [533], Fade (Smart) [533], Focus (Smart) [533], Perspective X/Y/XZ/YZ/XY (Smart) [533], Pulse (Smart) [533], Spin (Smart) [533], Swing (Smart) [533], Wobble (Smart) [534], Zoom (Smart) [534], Zoom Fade (Smart) [534], Zoom Focus (Smart) [534]

Description

Instead of configuring a start and/or end cushion using the Start Cushion [578] and/or End Cushion [578] check boxes, you can optionally let the CG Tools software calculate the cushion duration. Check the Auto Cushion Durations box to let the software calculate the cushion duration(s) over the entire length of the animation effect. This mirrors the previous way that cushions worked using the Cushion check box.

NOTE

The Start Cushion [578] and/or End Cushion [578] increment boxes will unavailable if the Auto Cushion Durations box is checked.

9.8.15.2 Auto Run On Update radio button

Applicable to the following Cool Move animation effects:

Continuous Ticker [462]

Description

If you have selected the Continuous Ticker Cool Move animation effect in conjunction with a field marker that is connected to a Global Field, select the Auto Run On Update to start the animation effect when data is received by the linked Global Field.

9.8.15.3 Centre Rotate check box

Applicable to the following Cool Move animation effects:

Crawl [462], Croll [463], Explode [463], Reverse Crawl [463], Reverse Roll [463], Roll [463], Static [464]

Description

Check the Centre Rotate box to force animation effect rotation about the centre of the character or graphic. Normally, characters or graphic elements twist around the baseline.

9.8.15.4 Cut and Fade radio buttons

Applicable to the following Standard Move animation effects:

Flash [535], Type [535]

Applicable to the following Cool Move animation effects:

Continuous Ticker [462]

Description

The Cut option enables the Flash or Type Cool Move animation effects to translate between their two states without any fade; the Fade option enables the effects to translate between their two states using fade.

If the Continuous Ticker animation effect is selected, the Cut and Fade option are only available for the OFF animation (when the Off option [570] is selected in the Format group box [576]). Selecting the Cut option in this instance will cut the ticker off screen without any fade; selecting the Fade option will fade the ticker into the page as it animates off screen. The fade duration can be configured using the Duration increment boxes [580].

9.8.15.5 End On Screen check box

Applicable to the following Standard Move animation effects:

Flash [535]

Applicable to the following Cool Move animation effects:

Crawl [462], Reverse Crawl [463], Reverse Roll [463], Roll [463]

Description

You can select whether the animation effect starts [577] and ends on screen. Select the End On Screen option to ensure that the animation effect ends with the text or graphic element present on the screen.

9.8.15.6 Follow check box

Applicable to the following Cool Move animation effects:

Croll [463]

Description

If you have selected the Croll Ticker Cool Move animation effect, check the Follow box to align the starting point on the x-axis for each line in a text page so that it matches the Croll angle configured using the Angle increment box [579] in the Settings group box [578].

NOTE

Its recommend that this setting is used in conjunction with Line option selected using the Render Units drop-down list box [577] in the Options group box [573].

9.8.15.7 Include Spaces check box

Applicable to the following Standard Move animation effects:

Type [535]

Description

Check the Include Spaces box to ensure that any space characters are counted as a character. This setting only applies when the Char option is selected using the Render Units drop-down list box [577].

NOTE

The selection to include spaces not apply to single graphic elements (e.g. shapes, cutout etc); it is only relevant to text objects and characters.

9.8.15.8 Light check box

Applicable to the following Smart Move animation effects:

Explode (Smart) 533

Description

Check the Light box to apply a simulated lighting effect to Smart Move characters which are plain coloured and have twist applied. The characters vary in colour as they rotate. Clear the Light box for uniform colouring. The colour of the of the light effect is supplied by the foreground shading colour.

9.8.15.9 Loop Indefinitely radio button

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

If you have selected the Continuous Ticker Cool Move animation effect, select the Loop Indefinitely option to loop or "repeat" the animation effect indefinitely until the next page is cued and taken.

9.8.15.10 Loop Times radio button and increment box

```
(0 to +100)
```

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

If you have selected the Continuous Ticker Cool Move animation effect, select the Loop Times option to loop or "repeat" the animation effect for a desired number of iterations. In the adjacent increment box, type in the required number of repeat iterations or use the increment and decrement buttons to jog the values up or down on.

9.8.15.11 Minimum Delay increment box

```
SS:FF
(0 to +59 : 0 to +29)
```

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

If you have selected the Continuous Ticker Cool Move animation effect, enter the required minimum delay in SS:FF between each repeat iteration or use the increment and decrement buttons to jog the values up or down on.

9.8.15.12 Minimum Gap increment box

```
(0 to +1000 pixels)
```

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

If you have selected the Continuous Ticker Cool Move animation effect, type in the required minimum gap in pixels between each repeat iteration or use the increment and decrement buttons to jog the values up or down on. The

setting is the minimum gap between the displayed updates sent via remote control to tickers which do not loop and which auto-run upon receiving the updates. The actual gap may be bigger if the preparation of an update takes too long, or of course if updates are not sent frequently enough.

9.8.15.13　Render Units drop-down list box

`(Char, Word, Line, Page)`

Applicable to the following Cool Move animation effects:

Crawl 462, Croll 463, Explode 463, Plughole 463, Reverse Crawl 463, Reverse Roll 463, Reverse Roll Bounce 463, Shuffle 464, Spiral Horizontal 464, Spiral Vertical 464, Static 464

Applicable to the following Smart Move animation effects:

Explode (Smart) 533, Fade (Smart) 533, Focus (Smart) 533, Perspective X/Y/XZ/YZ/XY (Smart) 533, Pulse (Smart) 533, Spin (Smart) 533, Swing (Smart) 533, Wobble (Smart) 534, Zoom (Smart) 534, Zoom Fade (Smart) 534, Zoom Focus (Smart) 534

Description

From the Render drop-down list box, select one of the following options:

Option	Description
Char	Entire characters will behave as single units for the purposes of rendering and display.
Word	Entire word will behave as single units for the purposes of rendering and display.
Line	Entire lines will behave as single units for the purposes of rendering and display.
Page	An entire text page under the control of the marker will behave as single units for the purposes of rendering and display.

NOTE

The selection of a render unit does not apply to single graphic elements (e.g. shapes, cutout etc); it is only relevant to text objects and characters.

9.8.15.14　Skew check box

Applicable to the following Cool Move animation effects:

Crawl 462, Croll 463, Explode 463, Plughole 463, Reverse Crawl 463, Reverse Roll 463, Reverse Roll Bounce 463, Shuffle 464, Spiral Horizontal 464, Spiral Vertical 464, Static 464

Description

Check the Skew box to force characters or graphics to be skewed backwards in the direction from which they have come, giving a cartoon-like movement effect. The Skew parameter is particularly effective with animation effects that have a strong horizontal component of motion.

9.8.15.15　Start On Screen check box

Applicable to the following Standard Move animation effects:

Flash 535

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

You can select whether the animation effect starts and ends on screen 575. Select the Start On Screen option to ensure that the animation effect starts with the text or graphic element present on the screen.

9.8.15.16   Start Cushion and End Cushion check boxes and increment boxes

Applicable to the following Cool Move animation effects:

Continuous Ticker [462], Crawl [462], Croll [463], Explode [463], Plughole [463], Reverse Crawl [463], Reverse Roll [463], Reverse Roll Bounce [463], Roll [463], Shred [464], Spiral Horizontal [464], Spiral Vertical [464], Static [464], Wave [464]

Applicable to the following Smart Move animation effects:

Explode (Smart) [533], Fade (Smart) [533], Focus (Smart) [533], Perspective X/Y/XZ/YZ/XY (Smart) [533], Pulse (Smart) [533], Spin (Smart) [533], Swing (Smart) [533], Wobble (Smart) [534], Zoom (Smart) [534], Zoom Fade (Smart) [534], Zoom Focus (Smart) [534]

Description

Enables a smooth cushion to be applied to the start and/or end of an animation effect.

Check the Start Cushion box to apply a smooth cushion to the start of the selected animation. Check the End Cushion box to apply a smooth cushion to the end of the selected animation. Clear the respective check boxes for an abrupt start/end. If the Auto Cushion Durations box [574] is cleared, specify cushion durations in `SS:FF` using the adjacent increment boxes.

9.8.15.17   Trail Ticker Off check box

Applicable to the following Cool Move animation effects:

Continuous Ticker [462]

Description

Check the Trail Ticker Off check box to prevents the continuous ticker from looping or fetching new data after it has been triggered to animate off screen.

9.8.16   Persistent check box

Available to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

To enable the selected graphic object and its animation settings to be continued on every subsequent page, check the Persistent box. This feature negates having to copy a graphic object onto other pages. The animation marker can then be triggered on any subsequent page. If a text object (line, spline or page) is supplied with field data from a Data Store or other source, the data source is re-initialised when the page CONTAINING the animation is next encountered.

9.8.17   Remove button

Applicable only to animations that have been applied to graphic objects using the Graphics> [395] Animated Path [400] command.

Marker based animations can be removed easily just by highlighting and deleting the marker. For animations applied to graphic objects using the Graphics>Animated Path command, use the Remove button to remove the animation settings from the selected graphic object.

9.8.18   Settings group box

The controls in this group box are NOT available when Custom Animation is selected from the Animation Type drop-down list box.

The controls in the Settings group box enable a wide variety of animation parameters to be configured.

SEE ALSO

Angle increment box [579]
Bounces increment box [579]

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   578

Copyright © 2000-2006 Pixel Power Ltd.

9.8.18.1 Angle increment box

`(0 to +360 degrees)`

Applicable to the following Cool Move animation effects:

Croll 463

Description

If you have selected the Croll Cool Move animation effect, in the Angle increment box, type in the required angle in degrees for a Croll animation or use the increment and decrement buttons to jog the value up or down on. The Croll angle is the angle along which the animation effect will vector its movement.

9.8.18.2 Bounces increment box

`(0 to +99)`

Applicable to the following Cool Move animation effects:

Reverse Roll Bounce 463

Description

If you have selected the Reverse Roll Bounce Cool Move animation effect, in the Bounces increment box, type in the required number of bounces to be used over the duration of the animation or use the increment and decrement buttons to jog the value up or down.

9.8.18.3 Direction drop-down list box

`(Left, Right, Up, Down, Fade, Cut)`

Applicable to the following Standard Move animation effects:

Wipe 535

Applicable to the following Cool Move animation effects:

Continuous Ticker 462

Description

Using the Direction drop-down list box, select one of the following options:

Option	Continuous Ticker 462	Wipe 535
Left	Animate the ticker from right to left.	Wipe the text from right to left.
Right	Animate the ticker from left to right.	Wipe the text from left to right.
Up	Animate the ticker from the bottom to the top of the screen.	Wipe the text from bottom to top.
Down	Animate the ticker from the top to the bottom of the screen.	Wipe the text from top to bottom.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Option	Continuous Ticker [462]	Wipe [535]
Cut	N/A	Cut the text wipe between its two states without any fade.
Fade	N/A	Fade the text wipe between its two states using fade over the defined duration in seconds and frames.

9.8.18.4 Duration increment boxes

```
MM:SS:FF
(0 to +60: 0 to +600 : 0 to +29)
```

Applicable to all Standard Moves, Cool Moves and Smart Moves except the Type [535] Standard Move animation effect.

Description

In the Duration increment boxes, type in the required duration for the animation in minutes, seconds and/or frames or use the increment and decrement buttons to jog the values up or down on.

NOTE

- Control over custom animation duration is achieved using the Timeline control box [355].
- The Minutes field is only available for the Continuous Ticker, Roll, Crawl, Reverse Roll, Reverse Crawl animation effects when there are no Twists or Stagger configured.

9.8.18.5 Flash Rate increment box

```
(0 to +99 frames)
```

Applicable to the following Standard Move animation effects:

Flash [535]

Description

If you have selected the Flash Cool Move animation effect, in the Flash Rate increment box, enter the number of frames between each flash i.e the number of frames between when the text is 100% visible and 0% visible or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Cut and Fade radio buttons [574]

9.8.18.6 Loops increment box

```
(0 to +99)
```

Applicable to the following Cool Move animation effects:

Shuffle [464]

Description

If you have selected the Shuffle Cool Move animation effect, in the Loops increment box, type in the required number of cycles of to-and-fro movement or use the increment and decrement buttons to jog the value up or down.

9.8.18.7 Slices increment box

`(0 to +99)`

Applicable to the following Cool Move animation effects:

[Shred](#) `464`, [Shred Through](#) `464`

Description

In the Slices increment box, type in the required number of slices that the text should be split into and used over the duration of the animation or use the increment and decrement buttons to jog the value up or down.

9.8.18.8 Softness increment box

`(0 to +999 pixels)`

Applicable to the following Standard Move animation effects:

[Wipe](#) `535`

Description

If you have selected the Wipe Cool Move animation effect, in the Softness increment box, enter the required number of pixels that will define the extent of the soft edge into which text or graphics will wipe or use the increment and decrement buttons to jog the value up or down.

9.8.18.9 Speed increment box

`(0 to +100 pixels per field)`

Applicable to the following Cool Move animation effects:

[Continuous Ticker](#) `462`, [Crawl](#) `462`, [Croll](#) `463`, [Reverse Crawl](#) `463`, [Reverse Roll](#) `463`, [Roll](#) `463`

Description

In the Speed increment box, enter the number of pixels per field that will determine the constant speed of the animation effect or use the increment and decrement buttons to jog the value up or down.

> **NOTE**
>
> This is an alternative to setting the animation effect duration using the [Duration increment box](#) `580`.

9.8.18.10 Stagger increment box and Stagger Dir drop-down list box

`(0 to +99)`
`(Left, Right, Outwards, Inwards)`

Applicable to the following Standard Move animation effects:

[Type](#) `535`

Applicable to the following Cool Move animation effects:

[Crawl](#) `462`, [Croll](#) `463`, [Explode](#) `463`, [Plughole](#) `463`, [Reverse Crawl](#) `463`, [Reverse Roll](#) `463`, [Reverse Roll Bounce](#) `463`, [Roll](#) `463`, [Shred](#) `464`, [Shred Through,](#) `464` [Shuffle](#) `464`, [Spiral Horizontal](#) `464`, [Spiral Vertical](#) `464`, [Static](#) `464`, [TeleType](#) `464`, [Wave](#) `464`

Applicable to the following Smart Move animation effects:

[Explode (Smart)](#) `533`, [Fade (Smart)](#) `533`, [Focus (Smart)](#) `533`, [Perspective X/Y/XZ/YZ/XY (Smart)](#) `533`, [Pulse (Smart)](#) `533`, [Spin (Smart)](#) `533`, [Swing (Smart)](#) `533`, [Wobble (Smart)](#) `534`, [Zoom (Smart)](#) `534`, [Zoom Fade (Smart)](#) `534`, [Zoom Focus (Smart)](#) `534`

Description

The Stagger increment box and Stagger Dir drop-down list box control how the animation effect is rendered and displayed.

Using the Stagger increment box, enter the required start delay between the start of subsequent units of the animation (whether they are characters, words or lines). By default, all the characters of the animation will be individually animated. The Render Units drop-down [577] in the Options group box [573] enables this to be changed. Depending on the selection, entire words or lines, or the entire text under the control of the marker, will behave as single units for the purposes of rendering and display.

With Page selected from the Render Units drop-down [577], the value specified using the Stagger increment box is superfluous, as there is only one unit to the animation. With the Stagger increment box set to 0, all the units will begin the animation together, move through the animation together, and end together. With a non-zero value set, each unit will start moving n fields after the previous one.

From the Stagger Dir drop-down list box, specify the direction in which stagger will be applied to the animated area. Select an option from the following:

Option	Description
Left	Stagger right to left.
Right	Stagger left to right.
Outwards	Stagger beginning at the centre of the text and spread outwards to the ends.
Inwards	Stagger beginning at the ends of the text and run inwards to the centre.

NOTE

The Stagger increment box is not available for the Type Cool Move animation effect.

9.8.18.11   Twists increment box

`(-99 to +99)`

Applicable to the following Standard Move animation effects:

Type [535]

Applicable to the following Cool Move animation effects:

Crawl [462], Croll [463], Explode [463], Plughole [463], Reverse Crawl [463], Reverse Roll [463], Reverse Roll Bounce [463], Roll [463], Spiral Horizontal [464], Spiral Vertical [464], Static [464]

Applicable to the following Smart Move animation effects:

Perspective X/Y/XZ/YZ/XY (Smart) [533], Spin (Smart) [533], Swing (Smart) [533], Wobble (Smart) [534], Zoom (Smart) [534], Zoom Fade (Smart) [534], Zoom Focus (Smart) [534]

Description

In the Twist increment box, enter the required number of quarter rotations each character performs during the animation or use the increment and decrement buttons to jog the value up or down. Set to 0 for no twist or rotation. Negative values can be used to reverse the direction of the twist.

9.8.18.12   Type Rate increment box

`(-10 to +99)`

Applicable to the following Standard Move animation effects:

Type [535]

Description

If you have selected the Type Cool Move animation effect, using the Type Rate increment box, define the rate at which

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   582

Copyright © 2000-2006 Pixel Power Ltd.
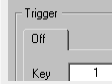
characters are typed (defines the delay in fields between each character).

9.8.19 Trigger group box

The controls in the Trigger group box enable control over how the selected animation effect is triggered. Depending on the options selected in the <u>Format group box</u> 570, effect configuration controls are grouped onto tabs.

Displayed tabs	Reason
Trigger On Key 1	If you have selected to animate the animation effect onto the screen (by selecting the <u>On</u> 571 option in the <u>Format group box</u> 570), then only the On tab is shown in the Trigger group box and all controls on that tab relate ONLY to the configuration of the animation ON to the screen.
Trigger Off Key 1	If you have selected to animate the animation effect off the screen (by selecting the <u>Off</u> 570 option in the <u>Format group box</u> 570), then only the Off tab is shown in the Trigger group box and all controls on that tab relate ONLY to the configuration of the animation OFF the screen.
Trigger On Off Key 1	If you have selected to animate the animation effect both onto and off the screen (by selecting the <u>On & Off</u> 570 option in the <u>Format group box</u> 570), then both the On and Off tabs are shown in the Trigger group box and all controls on each tab relate ONLY to the relevant animation type.
Trigger On/Off Key 1	If you have selected to animate the animation effect both onto and off the screen (by selecting the <u>On & Off</u> 570 option in the <u>Format group box</u> 570) and you have also checked the <u>Linked box</u> 584, then the On/Off tab is shown in the Trigger group box and all controls on that tab relate to animation both ON and OFF the screen.

NOTE

It is important to note that the options configured using the Trigger group box (e.g. trigger keys and animation order) are stored alongside and affected by other animation triggers and orders configured for the page (i.e. pasted live video images used by single page squeezeback animations etc.). This convention means that when configuring the triggering options for a selected animation effect, you should take into consideration other triggering and order options that you might have configured on other menus to ensure that the page plays out as you require.

SEE ALSO

9.8.19.1 Bring To Front On Trigger check box

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

Check the Bring To Front On Trigger box to bring the selected animation to the front of the animation stack on the selected page when the animation is triggered.

9.8.19.2 Delay increment boxes

```
SS:FF
(-20 to +20:0 to +29)
```

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

You have the following options:

- to start the selected animation effect after the page has been taken and after a specified subsequent delay has elapsed, type in the required number of seconds and/or frames or use the increment and decrement buttons to jog the values up or down on;
- to start the animation effect when the page is taken, set the adjacent Delay increment boxes to 0.

9.8.19.3 Group Key text box

```
(alphanumeric key)
(SHIFT + F1-F12)
(CTRL + F1-F12)
```

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

Enter the alphanumeric key or SHIFT/CTRL + F1-F12 key sequence in the Key text box that will action the animation effect. Entry of the F1-F12 function keys together with the SHIFT and CTRL keys will result in the following reference being shown in the Group Key text box:

Function key	Shown in Group Key text box	Example
SHIFT	S	S+F6
CTRL	C	C+F6

9.8.19.4 Linked check box

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

If you have selected the On & Off option ⌐570⌐ in the Format group box, ⌐570⌐ to ensure that the same parameters are used to configure an effects' ON and OFF trigger, ensure that the Linked box is checked. The On/Off tab is displayed if the Trigger group box ⌐583⌐ and all controls on that tab relate to ON and OFF animation triggers.

SEE ALSO

Foreground animation triggering ⌐44⌐
Foreground animation ordering ⌐44⌐

9.8.19.5 Order increment box

```
(0 to 999)
```

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Description

In the Order increment box, enter a value to determine the order in which animations grouped by the same trigger key are played out or use the increment and decrement buttons to jog the value up or down on.

SEE ALSO

Foreground animation ordering ⌐44⌐

9.8.19.6 Renumber button

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

Where an animation effect needs to be entered into an existing order sequence where there is no gap, configure the order number using the use the Order increment box ⌐584⌐ then select the Renumber button to create a space in the sequence. This will shuffle the playout order numbers for any animations that use the selected trigger key on the

current page.

SEE ALSO

[Foreground animation triggering](#) [44]
[Foreground animation ordering](#) [44]

9.8.19.7   Wait check box

Applicable to all Standard Moves, Cool Moves, Smart Moves and Custom Animation effects.

To start the animation effect after the page has been taken and a subsequent Trigger keypress defined using the [Key text box](#) [584], select the Wait option.

9.9   Apply Font Size Fix dialog box

Due to a windows font bug, versions of the software prior to v 4.7.1.0 performed incorrect font height calculations for some fonts. This process attempts to automatically fix the problems caused by this issue. If you are experiencing characters that are smaller than with previous versions of the software, or kerning/spacing of characters that is too wide compared to previous versions, run this process to correct the problems.

- To display the Apply Font Size Fix dialog box, select [Options>](#) [429] [Misc>Apply Font Size Fix](#) [432]. The Apply Font Size Fix dialog box is displayed.
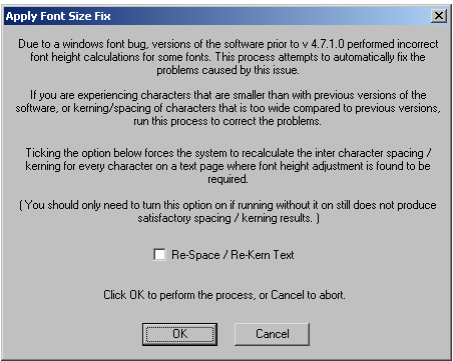
9.10   ASCII Import dialog box

The importation of ASCII text is achieved using the ASCII Import dialog box.

- To display the ASCII Import dialog box where an ASCII text file can be selected and import options configured, select [Text>](#) [408] [ASCII Import](#) [418]. The ASCII Import dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
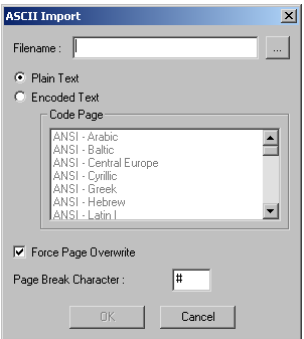
9.10.1 Code Page list box

If the Encoded Text [586] option is selected, select the appropriate code page from the Code Page list box.

9.10.2 Encoded Text radio button

Select Encoded Text option if the selected ASCII text file is encoded with a code page. Select the desired code page from the Code Page list box [586].

9.10.3 Filename text box and browse button

Enter the file path in the Filename text box of the subtitle file that you want to import or select the browse button and browse for the desired text file. If the browse button is selected, the Open dialog box [748] appears where you can browse and select the desired file.

9.10.4 Force Page Overwrite check box

Check the Force Page Overwrite box to ensure that existing pages in the current job that are referenced in the imported ASCII text file are overwritten, INSTEAD of being appended with content.

9.10.5 Page Break Character text box

Use the Page Break Character text box to specify the ASCII character will define a page break in the imported ASCII file.

9.10.6 Plain Text radio button

Select the Plain Text option to specify that ASCII subtitle file is formatted as plain text.

9.11 Avid Effect Page Sequence dialog box [CLARITY PLUGIN]

The Avid Effect Page Sequence dialog box is displayed with the main application window of the Clarity Plugin application when the user interface is prompted to be displayed from a supported Avid product.

```
IDD_AVIDPLUGINSEQUENCE
```

To be completed at a later date.

<PAW>

9.12   BMP Image Options dialog box

The BMP Image Options dialog box is displayed in circumstances where you are saving Microsoft Windows Bitmap images from the CG Tools software. For example, when saving the background layer of a page to an image using Background> [419]Save Background [420]. After selecting the BMP file format on the Save Background Image dialog box [781] and selecting OK, the BMP Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
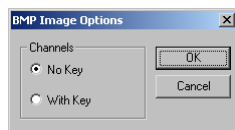
9.12.1   Channels group box

Select whether to save the BMP image with [587] or without [587] its key/alpha channel.

9.12.1.1   No Key radio button

Select the No Key option to omit the key/alpha channel from the saved BMP image.

9.12.1.2   With Key radio button

Select the With Key option to include the key/alpha channel with the saved BMP image.

9.13   Cel Animation/Video Clip Playout dialog box

The Cel Animation/Video Clip Playout dialog box is displayed when either:

- the Set Loop/Pause button is selected on the Video Clip [759]/Background dialog tab [756] on the Page Settings dialog box [751];
- the Set Loop/Pause button is selected on the Clip Playback Settings control tab [276] on the Graphic Tools [266].
- the Advanced Loop/Pause button is selected on the Cel Playback Settings (Cel) control box [274] on the Graphic Tools [266].

It enables the configuration of playback settings for the selected cel animation or video clip.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
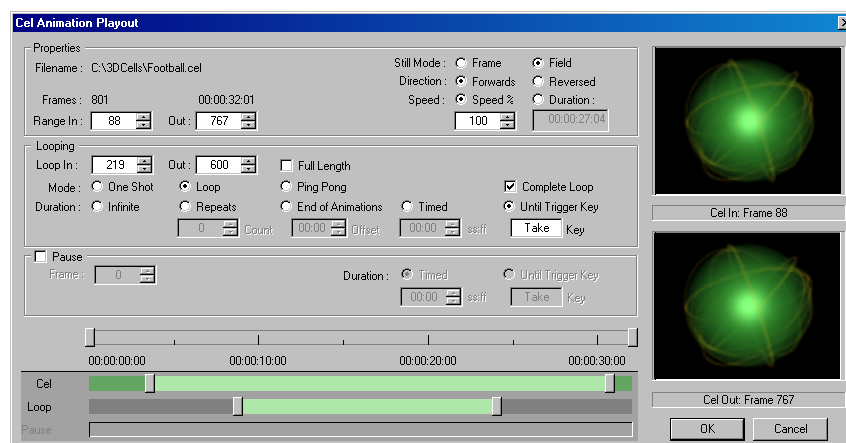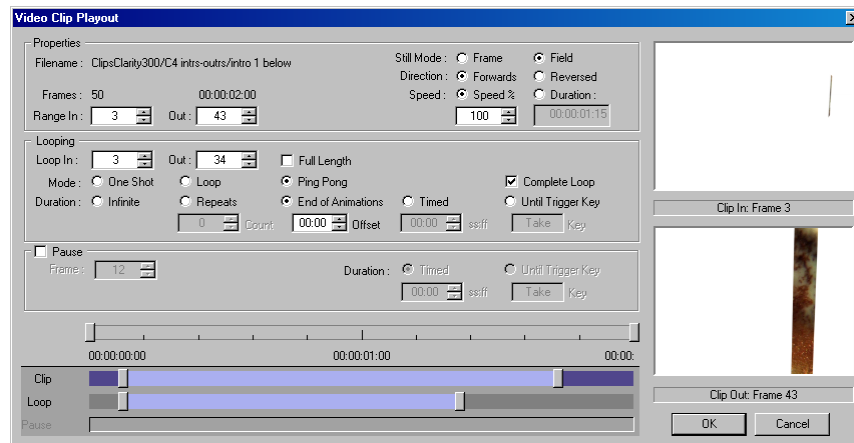
The dialog box is split into three main areas. All playout parameters can be specified using the controls in the group boxes. Additionally, some of these parameters can be adjusted using the four timelines located in the bottom portion of the dialog box. Previews of any changes (where relevant) made to available parameters are shown using the preview windows on the right hand side of the dialog box.

9.13.1   Cel In/Clip In preview

Previews the starting frame for the selected cel animation or video clip as defined using the Range In increment box 589 in the Properties group box 588 and the Start marker on the Cel\Clip timeline 592.

9.13.2   Cel Out/Clip Out preview

Previews the ending frame for the selected cel animation or video clip as defined using the Range Out increment box 589 in the Properties group box 588 and the End marker on the Cel\Clip timeline 592.

9.13.3   Properties group box

The Properties group box enables the configuration of cel animation or video clip settings including playback range in frames 589, direction 588, speed/duration 589 and whether frames or fields 589 are displayed when the selected cel animation or video clip is paused.

9.13.3.1   Direction

The playback direction can be set to either forward 588 or reverse 588.

9.13.3.1.1   Forwards radio button

Select the Forwards option to playback the selected cel animation or video clip forwards (default).

9.13.3.1.2   Reversed radio button

Select the Reversed option to playback the selected cel animation or video clip in reverse.

9.13.3.2   Filename

Displays the path and filename of the selected cel animation or video clip.

9.13.3.3   Frames and Time

Displays the length of the selected cel animation or video clip in both frames and time (HH.MM.SS.FF).

9.13.3.4   Range

The range of frames to be played from the selected cel animation or video clip can be configured using the Range In ⌐589⌐ and Range Out ⌐589⌐ increment boxes.

9.13.3.4.1   Range In increment box

`(n frames)`

Use this increment box to configure the starting frame within the selected cel animation or video clip. Enter a value in frames or use the increment and decrement buttons to jog the value up or down.

This value can also be configured interactively using the Cel\Clip timeline ⌐592⌐ by dragging the Start marker.

Notice that the frame shown by the Cel In/Clip In preview ⌐588⌐ will change to match the specified frame.

9.13.3.4.2   Range Out increment box

`(n frames)`

Use this increment box to configure the starting frame within the selected cel animation or video clip. Enter a value in frames or use the increment and decrement buttons to jog the value up or down.

This value can also be configured interactively using the Cel\Clip timeline ⌐592⌐ by dragging the End marker.

Notice that the frame shown by the Cel Out/Clip Out preview ⌐588⌐ will change to match the specified frame.

9.13.3.5   Speed

The speed at which the selected cel animation or video clip will playback can be configured as either a percentage ⌐589⌐ or as a duration ⌐589⌐.

9.13.3.5.1   Duration radio button and increment box

`(HH:MM:SS:FF)`

Select the Duration option to configure the playback speed of the selected cel animation or video clip as a duration. In the increment box below, enter a duration in HH:MM:SS:FF or use the increment and decrement buttons to jog the value up or down. The playback speed will be calculated automatically from the defined duration.

9.13.3.5.2   Speed radio button and increment box

Select the Speed option to configure the playback speed of the selected cel animation or video clip as a percentage of its total length. In the increment box below, enter a value in percent or use the increment and decrement buttons to jog the value up or down.

9.13.3.6   Still Mode

If you have configured the selected cel animation or video clip to pause at some point, you can define whether the paused video is shown as a whole single frame ⌐590⌐ or as a field ⌐589⌐.

9.13.3.6.1   Field radio button

Select the Field option to display a whole field when the selected cel animation or video clip is paused.

9.13.3.6.2 Frame radio button

Select the Frames option to display a whole frame when the selected cel animation or video clip is paused.

9.13.4 Looping group box

The Looping group box enables the configuration of looping settings including <u>mode</u> 590⟩, <u>duration</u> 590⟩ and loop <u>playback range.</u> 591⟩

9.13.4.1 Duration

Either <u>Loop</u> 591⟩ or <u>Ping Pong</u> 591⟩ must be selected from the <u>Looping</u> 590⟩ group box before the duration controls are enabled.

The loop duration can run <u>infinitely</u> 590⟩, for a <u>set period of time</u> 590⟩, <u>repeat a set number of times</u> 590⟩, until a <u>trigger key is pressed</u> 590⟩ or until all <u>page foreground animation has completed</u> 590⟩.

9.13.4.1.1 End of Animations radio button and Offset increment box

```
Offset (SS:FF)
```

Select the End of Animation option to loop the selected cel animation or video clip until all page foreground animation is complete. In the Offset increment box, enter an offset value in SS:FF or use the increment and decrement buttons to jog the value up or down. This value is how long the loop will continue after page foreground animation has completed.

9.13.4.1.2 Infinite radio button

Select the Infinite option to loop the cel animation or video clip until the next page is taken.

9.13.4.1.3 Repeats radio button and Count increment box

```
Repeats (n repeats)
```

Select the Repeats option to repeat the loop sequence for a selected number of times. In the Count increment box, enter a value or use the increment and decrement buttons to jog the value up or down.

9.13.4.1.4 Timed radio button and ss:ff increment box

```
Timed (SS:FF)
```

Select the Timed option to loop the selected cel animation or video clip for a set period of time. In the ss:ff increment box, enter duration value in SS:FF or use the increment and decrement buttons to jog the value up or down. This value is how long the loop will continue.

9.13.4.1.5 Until Trigger Key radio button and Key text box

```
Key (keyboard trigger key)
```

Select the Until Trigger Key option to loop the selected cel animation or video clip until a trigger key is pressed. In the Key text box, enter the desired trigger key.

9.13.4.2 Mode

A mode or looping type (<u>one shot</u> 591⟩, <u>standard loop</u> 591⟩ or <u>ping pong</u> 591⟩) can be selected. The loop can also be set to <u>complete</u> 591⟩ a full final sequence after the loop has been actioned to stop.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   590

Copyright © 2000-2006 Pixel Power Ltd.

9.13.4.2.1   Complete Loop check box

Either Loop ⌐591¬ **or Ping Pong** ⌐591¬ **must be selected from the Looping** ⌐590¬ **group box before this control is enabled.**

If you have selected to loop:

- until all foreground animation is complete using the End of Animations option and Offset increment box ⌐590¬;
- for a set period of time using the Timed radio button and ss:ff increment box ⌐590¬;
- until a trigger key is pressed using the Until Trigger Key radio button and Key text box ⌐590¬;

select this option to ensure that the loop completes a full final sequence after the loop has been actioned to stop.

9.13.4.2.2   Loop radio button

Select the Loop option to loop the selected cel animation or video clip in the same direction.

9.13.4.2.3   One Shot radio button

Select the One Shot option to play the selected cel animation or video clip only once.

9.13.4.2.4   Ping Pong radio button

Select the Ping Pong option to loop the selected cel animation or video clip but alternate the direction of playout after completion of each cycle.

9.13.4.3   Loop

Either Loop ⌐591¬ **or Ping Pong** ⌐591¬ **must be selected from the Looping** ⌐590¬ **group box before the looping controls are enabled.**

The cel animation or video clip can be looped over its full length ⌐591¬ or over a range of frames using in ⌐591¬ and out ⌐591¬ points.

9.13.4.3.1   In increment box

`(n frames)`

Enter a starting point in frames for the loop or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the Loop timeline ⌐592¬ by dragging the Start marker.

9.13.4.3.2   Out increment box

`(n frames)`

Enter an ending point in frames for the loop or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the Loop timeline ⌐592¬ by dragging the End marker.

9.13.4.3.3   Full Length check box

Select this option to loop the entire selected cel animation or clip. This is equivalent to dragging the Start and End markers to each respective end of the Loop timeline ⌐592¬.

9.13.5   Pause group box

The Pause group box enables the selection of a frame ⌐592¬ within the selected cel animation or video clip where a pause will occur and how long the pause should last ⌐592¬.

9.13.5.1 Duration

The pause duration can either be set by defining a <u>timed duration</u> ⌐592⌐ or by specifying a <u>trigger key</u> ⌐592⌐ to end the pause.

9.13.5.1.1 Timed radio button and ss:ff increment box

```
Timed (SS:FF)
```

Select the Timed option to pause the selected cel animation or video clip for a set period of time. In the ss:ff increment box, enter duration value in SS:FF or use the increment and decrement buttons to jog the value up or down. This value is how long the pause will last.

9.13.5.1.2 Until Trigger Key radio button and increment box

```
Key (keyboard trigger key)
```

Select the Until Trigger Key option to pause the selected cel animation or video clip until a trigger key is pressed. In the Key text box, enter the desired trigger key.

9.13.5.2 Frame increment box

```
(n frames)
```

Use this increment box to configure the frame within the selected cel animation or video clip where the pause will occur. Enter a value in frames or use the increment and decrement buttons to jog the value up or down.

This is equivalent to dragging the Pause marker on the <u>Pause timeline</u> ⌐593⌐.

9.13.5.3 Pause check box

Check this box to enable the pausing of the selected cel animation or video clip.

9.13.6 Timelines

The timelines enable interactive configuration of cel animation or video clip <u>playback duration</u> ⌐592⌐, <u>loop duration</u> ⌐592⌐ and the <u>pause frame</u> ⌐593⌐. The <u>Master timeline and scale</u> ⌐593⌐ is shown above three object timelines and works in a similar way to the <u>Master timeline and scale</u> ⌐356⌐ on the <u>Timeline control box</u> ⌐355⌐.

9.13.6.1 Cel\Clip timeline

The Clip timeline enables the start and end points to be defined interactively for the selected video clip. This is equivalent to configuring the <u>Range In</u> ⌐589⌐ and <u>Range Out</u> ⌐589⌐ increment boxes in the <u>Properties group box</u> ⌐588⌐.

Notice that the frames shown by the <u>Cel In/Clip In preview</u> ⌐588⌐ and <u>Cel Out/Clip Out preview</u> ⌐588⌐ will change to match the specified starting and end frames.

9.13.6.2 Loop timeline

Either <u>Loop</u> ⌐591⌐ or <u>Ping Pong</u> ⌐591⌐ must be selected from the <u>Looping</u> ⌐590⌐ group box before this timeline is enabled.

The Loop timeline enables the start and end points of the loop sequence to be defined interactively for the selected cel animation or video clip. This is equivalent to configuring the <u>In</u> ⌐591⌐ and <u>Out</u> ⌐591⌐ increment boxes in the <u>Looping group box</u> ⌐590⌐.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   592

Copyright © 2000-2006 Pixel Power Ltd.

9.13.6.3 Master timeline

The master timeline enables you to zoom in or out on a particular portion of the current pages' duration, thus causing the master timeline scale and Cel/Clip 592, Loop 592 and Pause 593 timelines to be re-calibrated. It features a slider bar and a relative time scale below.

9.13.6.4 Pause timeline

The Pause 592 box must be must be checked in the Pause group box 591 before this timeline is enabled.

The Pause timeline enables the interactive selection of the frame within the selected cel animation or video clip where the pause will occur. This is equivalent to configuring the Frame increment box 592 in the Pause group box 591.

9.14 Cel Conversion Tool dialog box

A new cel animation file format has was introduced in version 6.3.0.0 of the CG Tools software which takes the place of the previous .PPC file format. The new .CEL format has been improved and optimised to ensure more efficient playback and use of system resources. The Cel Conversion Tool dialog box enables the conversion.

- To display the Cel Conversion Tool dialog box, select File> 378 Convert Cel 381. The Cel Conversion Tool dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
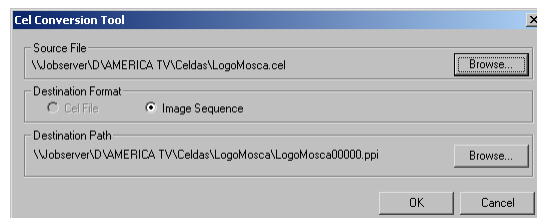
  After specifying the source and destination format path, select OK to begin the conversion. The Cel Field/Frame Type dialog box 594 is displayed.

SEE ALSO

Old .PPC versus new .CEL cel animation format 450

9.14.1 Destination Format group box

Enables the selection of whether you want to convert the selected .PPC cel animation file to a .CEL animation file 593 or to an image sequence. 593

9.14.1.1 Cel File radio button

Select the Cel File option to save the .PPC file as a .CEL file.

9.14.1.2 Image Sequence radio button

Select the Image Sequence option to save the .PPC file as a sequence of images.

SEE ALSO

Image sequence file naming conventions 500

9.14.2   Destination Path group box

Displays the path and name of the cel animation or image sequence that you want to write to. Click on Browse to select a new or alternative cel animation or image sequence. The Save Cel Animation dialog box 783 or Export Cel Frames dialog box 631 is displayed where you can select a new or alternative cel animation or the first image of a sequence.

SEE ALSO

Image sequence file naming conventions 500

9.14.3   Source File group box

Displays the path and name of the cel animation that you want to convert. Click on Browse to select a new or alternative cel animation. The Convert Cel Animation dialog box 602 is displayed where you can select a new or alternative cel animation.

9.15   Cel Field/Frame Type dialog box

Before .PPC to .CEL animation file conversion takes place, you are asked to select how fields or frames are stored in the cel animation. The person that created the cel should know the correct setting to use.

- To display the Cel Field/Frame Type dialog box, select OK on the Cel Conversion Tool dialog box 593.
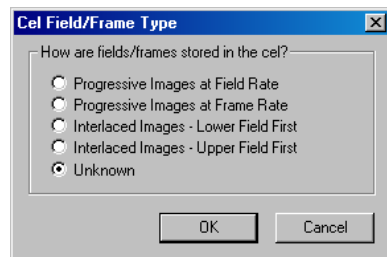
9.15.1   How are fields/frames stored in the cel group box

Using the available options, select how fields or frames are stored in the cel animation. The person that created the image sequence should know the correct setting to use. Also refer to the documentation supplied with your cel animation creation software e.g. Autodesk® 3ds Max®.

Type	Description
Progressive Images at Field Rate	Each frame contains two full images enabling positioning on any scan line to ensure maximum quality. Uses more disk space.
Progressive Images at Frame Rate	Each frame contains one full image enabling positioning on any scan line. Playback is less smooth due to half as many images. Uses less disk space.
Interlaced Image - Lower Field First	Each frame contains two alternate half screen images with the lower field image shown first. Good quality but must be positioned on the correct scan line.
Interlaced Image - Upper Field First	Each frame contains two alternate half screen images with the upper field image shown first. Good quality but must be positioned on the correct scan line.
Unknown	Enable the software to interpret automatically how cel frames are stored.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   594

Copyright © 2000-2006 Pixel Power Ltd.

9.16 Clarity Log In dialog box

Enables a user to login to the CG Tools software. The Clarity Log In dialog box is displayed when the CG Tools software is started.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

NOTE

The user management system can be configured to log users into the CG Tools software via their Microsoft® Windows® account login. If the Administrator has checked the Use Windows login sessions to login to Clarity on startup check box 667 in the Advanced Options group box 666 on the Users dialog tab 665 on the Global Preferences dialog box 654, when the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the Users.xml 172 file, then CG Tools will login transparently using that user account.

SEE ALSO

Logging into the user management system 136
Example user management and Clarity Server workgroup configuration 139
User management system feature reference 133
Featured XML files, basic description and tag reference (where relevant) 166
Add/Edit User dialog box 560
Users dialog tab 665
Global Preferences dialog box 654

9.16.1 Login Details group box

Enables entry of a username 595 and password 595, defined using the Add/Edit User dialog box 560. After entry of a valid username and corresponding password, the CG Tools software can be used.

9.16.1.1 User Name text box

Enter the username as defined for your account by your system administrator.

NOTE

Please contact your system administrator if you do not have an account for your workgroup or your have forgot your username/password.

9.16.1.2 Password text box

Enter the password as defined for your account by your system administrator.

NOTE

Please contact your system administrator if you do not have an account for you workgroup or your have forgot your username/password.

9.17 Clarity Log Out dialog box

Enables a user to log out of the CG Tools software. The Clarity Log Out dialog box is displayed when the File> 378 Log Off 384 menu command is selected.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
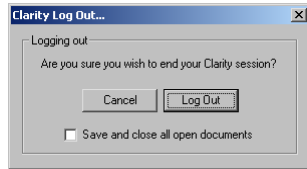
SEE ALSO

Logging out of the user management system 136
Example user management and Clarity Server workgroup configuration 139
User management system feature reference 133
Featured XML files, basic description and tag reference (where relevant) 166
Add/Edit User dialog box 560
Users dialog tab 665
Global Preferences dialog box 654

9.17.1 Logging Out group box

Enables the selection of whether to log out or cancel the log out operation 596. Also enables any unsaved files to be saved 596 before closing.

9.17.1.1 Log Out and Exit buttons

Select either the Log Out button to log out and close the CG Tools software or Exit to revert back to the CG Tools software.

9.17.1.2 Save and close all open documents check box

To ensure that all open jobs and associated files that have not been saved are saved when the CG Tools software is closed, check the Save and close all open documents box.

9.18 Clarity Server dialog box

Enables the specification of a DNS network name (hostname) for a desired Clarity Server. Additionally, each server can be given an alias.

To display the Clarity Server Job Path dialog box, follow the steps below:

- Select Add 657 on the Clarity Servers dialog tab 655 on the Global Preferences dialog box 654. The Clarity Server dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
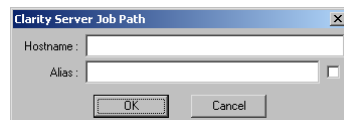
9.18.1   Hostname text box

Enter the DNS network name (hostname) of the desired Clarity Server in the Hostname text box.

9.18.2   Alias check box and text box

Additionally, each server can be given an alias, allowing for more meaningful names, and a server can be listed more than once with differing aliases. This means that each alias can then have different setup e.g. one where clips are copied, one where they are not. Check the Alias box and then enter a name in the adjacent text box.

9.19   Clarity Server Job Path dialog box

Enables the specification of a server job path for a desired Clarity Server. Additionally, each job path MUST be given an alias.

To display the Clarity Server Job Path dialog box, follow the steps below:

- Select Add in the Job Path Configuration group box ⌐661⌐ on the Clarity Servers dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐. The Clarity Server Job Path dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
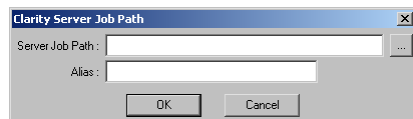
9.19.1   Server Job Path text box and browse button

Enter the desired job path in the Server Job Path text box. Alternatively, select the adjacent browse button and navigate to the folder on the local drive via My Computer. After selecting browse, the Browse for Folder dialog box is displayed.
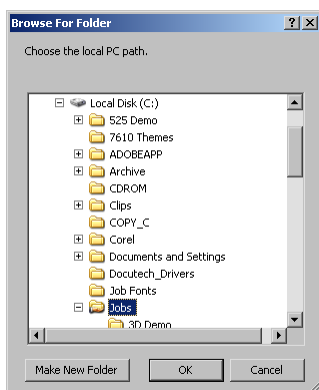
Browse to the local drive and folder via My Computer, then select OK to revert back to the Drive Map dialog box.

9.19.2   Alias text box

Additionally, each job path MUST be given an alias, allowing for more meaningful names. Enter a name in the Alias text box.

9.20   Collage Drive Mappings dialog box

The configuration of Collage Drive mappings is achieved using the Collage Drive Mappings dialog box. To display the Collage Drive Mappings dialog box, follow the steps below:

- Select Options> [429] Collage Import>Drive Mappings [432]. The Collage Drive Mappings dialog box is displayed.
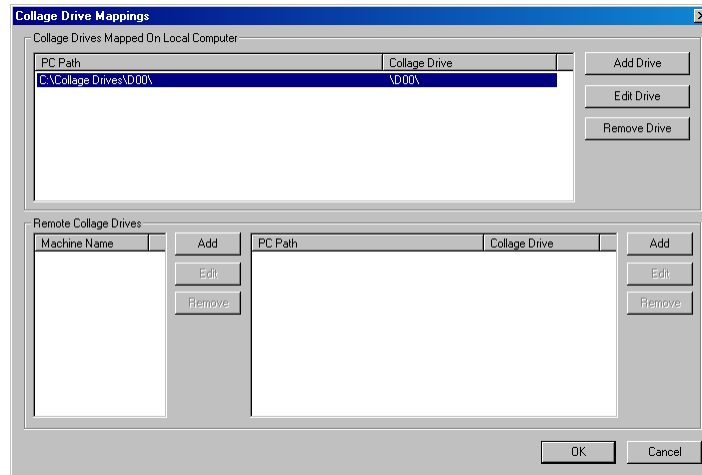
SEE ALSO

Drive mapping in post CG Tools 4.3.1.0 software [454]

9.21   Collage Image Options dialog box

The Collage Image Options dialog box is displayed in circumstances where you are saving Pixel Power Collage images from the CG Tools software. For example, when saving the background layer of a page to an image using Background> [419] Save Background [420]. After selecting the Collage file format on the Save Background Image dialog box [781] and selecting OK, the Collage Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
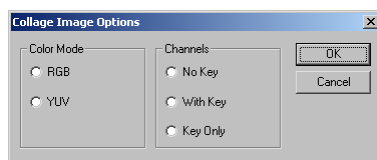
9.21.1   Channels group box

Select whether to save the Collage image with [587] or without [587] its key/alpha channel.

9.21.1.1   No Key radio button

Select the No Key option to omit the key/alpha channel from the saved Collage image.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   598

Copyright © 2000-2006 Pixel Power Ltd.

9.21.1.2   With Key radio button

Select the With Key option to include the key/alpha channel with the saved Collage image.

9.21.2   Colour Mode group box

To specify what colour model the image is saved in, select either the YUV ⌐599⌐ or RGB ⌐599⌐ option.

9.21.2.1   RGB radio button

Select the RGB option to save the Collage image in the RGB colour model.

9.21.2.2   YUV radio button

Select the YUV option to save the Collage image in the YUV colour model.

9.22   Colour Selection dialog box

The Colour selection box is displayed in a variety of different situations where the selection of a colour is required.
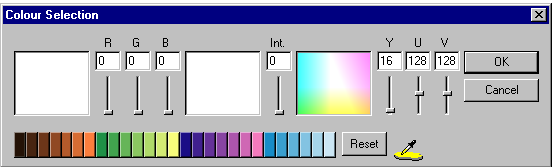
This dialog box contains colour selection tools identical to those featured on the Colour control tab ⌐277⌐ on the Graphic Tools ⌐266⌐.

9.23   Compiling Cell File dialog box

The Compiling Cell File dialog box is displayed after selecting OK on the Save Cel Animation dialog box ⌐783⌐. It depicts the progress of individual cel frame compilation into a .CEL cel animation file that is subsequently inserted on the current page open in the Graphic Edit window ⌐260⌐.
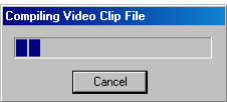
SEE ALSO

Cel and Clip control set ⌐303⌐
Cel Creation control tab ⌐271⌐

9.24   Compression Settings dialog box

The Compression Settings dialog box enables you to select a codec to output job playback to when playing out jobs using the Playout File Output ⌐347⌐ control box. The available codecs listed by this dialog box are sourced from the range installed with the Apple QuickTime Player and any QuickTime plugins that you have installed on the current machine.

- To display the Compression Settings dialog box, ensure that QuickTime is selected in the Output File Format drop-down list box on the Playout File Output ⌐347⌐ control box before selecting the Start record on Take button ⌐350⌐. The dialog box shown below will feature different controls depending on the codec selected using the Compression type drop-down list box.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
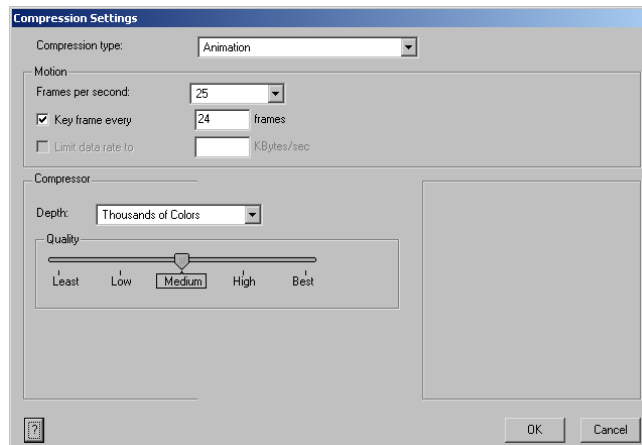
Sub-sections detail briefly the controls available. For in-depth information, select the help ? button the bottom-left hand corner of the dialog box to open the Apple website help pages (internet connection required). Alternatively, go to the address listed below:

http://helpqt.apple.com/qthelpwr3/english/QuickTimeHelp/pgs2/qtcompress.htmln

NOTE

In order to output to the Apple QuickTime format, you must have a copy of the latest version of the Apple QuickTime Player installed. This means that you will have the latest codecs installed to ensure the best possible output. See http://www.apple.com/quicktime/win.html for more information and downloads.

SEE ALSO

Compression type drop-down list box 600
Motion group box 600
Compressor group box 601

9.24.1 Compression type drop-down list box

Use the Compression type drop-down list box to select the desired compressor (codec) that you want to use to compress the QuickTime .MOV file that is being output. Selection of a codec will dictate the options available for configuration on the Compression Settings dialog box. It will also affect the availability of parameters for available options.

9.24.2 Motion group box

The controls in the Motion group box enable the configuration of the number of frames per second 600, the number of key frames 601 used and the movie data rate 601.

9.24.2.1 Frames per second text box

Frame rate is the number of individual images shown every second. Standard (NTSC) video has a frame rate of 29.97 frames per second (fps), and the standard for film is 24 fps. The European standard (PAL) is 25 fps. QuickTime movies are sometimes created with a slower frame rate to reduce bandwidth and CPU requirements.

Movies with higher frame rates show motion better but have larger file sizes. If you choose a frame rate that's lower than the movie's current frame rate, frames will be deleted. If you choose a number that's higher than the movie's current frame rate, existing frames will be duplicated (not recommended, since it increases file size without improving quality). When choosing a frame rate, use a simple fraction of your current frame rate, such as 1/2, 1/3, and so on. For example, if your current frame rate is 30 (29.97), use 15 or 10.

9.24.2.2 Key frame every drop-down list box

Many compressors use "frame differencing" to compress moving images. Frame differencing is the process of determining what information has changed from a starting frame (called a "key frame") to subsequent frames. The key frame contains all of the information for an image. Subsequent frames contain only the information that has changed.

Depending on the compressor you use, you can specify how often you want key frames to occur. If you don't have enough key frames, the quality of your movie might be lower because most frames are generated from others. However, more key frames result in a larger movie with a higher data rate. With some compressors, an additional key frame is inserted automatically if too much of the image has changed from one frame to the next. A good rule of thumb for general use is to have one key frame every 5 seconds (multiply the frames per second by 5). If you are creating a file for RTSP streaming and have concerns about the reliability of the delivery network (as with the public Internet), you may want to increase key frame frequency to one key frame every 1 or 2 seconds.

NOTE

This control is only available for some codecs.

9.24.2.3 Limit data rate to text box

In general, the higher the data rate, the better the quality, but the bigger the file. In most cases, you'll want to set a data rate based on the way your movie will be viewed. For example, for streaming to Internet dialup connections, limit the data rate to around 45 kilobits per second to leave room for network traffic. If the file will be downloaded for playback, the data rate can be higher (a 56K modem user, however, has longer to wait before playback begins). The data rate of a movie is also affected by other compression options you set, such as the frame rate.

NOTE

This control is only available for some codecs.

9.24.3 Compressor group box

The controls in the Compressor group box enable the configuration of colour depth 60↑, quality/compression 60↑, scan mode 60↑, aspect ratio 602↓ and any advanced options 602↓.

9.24.3.1 Depth drop-down list box

Use the Colour Depth drop-down list box to select the colour depth of the QuickTime .MOV file that is being output.

NOTE

This control is only available for some codecs.

9.24.3.2 Quality slider bar/Compression drop-down list box

Use the Quality slider bar or Compression drop-down list box to set the amount of compression for the QuickTime .MOV file that is being output.

NOTE

This control is only available for some codecs.

9.24.3.3 Scan Mode drop-down list box

Use the Colour Depth drop-down list box to select the scan mode (interlaced or progressive) of the QuickTime .MOV file that is being output.

NOTE

This control is only available for some codecs.

9.24.3.4   Aspect Ratio drop-down list box

Use the Aspect Ratio drop-down list box to select the aspect ratio (4:3 or 16:9) of the QuickTime .MOV file that is being output.

NOTE

This control is only available for some codecs.

9.24.3.5   Options button

Select the Options button to display options relevant to the codec that you have selected using the Compressor type drop-down list box [600].

NOTE

This control is only available for some codecs.

9.25   Confirm Clip Replace dialog box

The Confirm Clip Replace dialog box is displayed when cutting, copying and pasting clips using the Clarity Explorer [362].
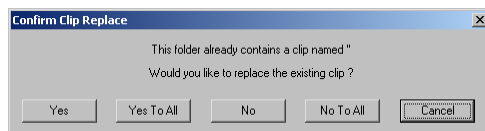
Button	Description
Yes	Overwrite current version of named clip in the destination folder.
Yes To All	Overwrite current versions of all clips in the destination folder.
No	DO NOT overwrite current version of named clip in the destination folder.
No To All	DO NOT overwrite current versions of all clips in the destination folder.
Cancel	Cancel copy operation and return to the Clarity Explorer [362].

9.26   Convert Cel Animation dialog box

The selection of .PPC cel animation file for conversion to .CEL format is achieved using the Convert Cel Animation dialog box.

- To display the Convert Cel Animation dialog box, select Browse from the Source File group box on the Cel Conversion Tool dialog box. [593] The Convert Cel Animation dialog box is displayed.
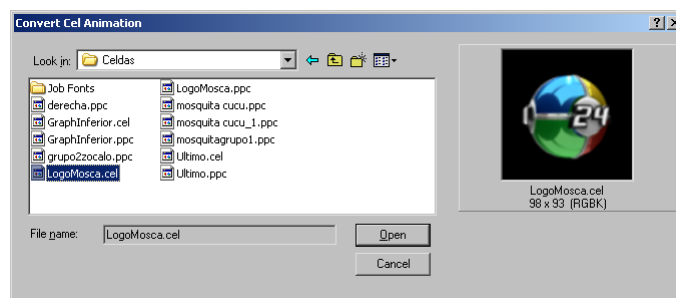
1. Browse to location where the .PPC file is located.
2. Select the desired .PPC file.
3. Select Open to select the .PPC file and return to the Cel Conversion Tool dialog box [593].

9.27 Converting Page dialog box

The Converting Page dialog box is displayed after changing the page format for the page currently open in the Graphic Edit window |260⟩ or selected pages in the Page Browser |251⟩/Page List |252⟩, providing the aspect ratio of the new standard matches that associated with the previous video standard.

See Video standards and aspect ratios on a page-by-page basis |549⟩ for more information.
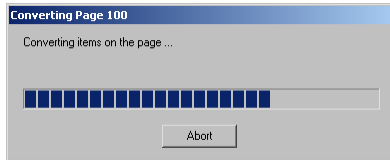
Its shows the progress of conversion for each selected page in sequence, with the page number currently being converted listed in the title bar. If a page contains associated files that need to be converted, they will be named during the conversion above the progress bar.

This dialog box only appears if you have selected to enable changes to the page format and aspect ratio to affect pages that contain content. This can be done using the Changing Page Formats group box |667⟩ on the Video dialog tab |667⟩ on the Global Preferences dialog box |654⟩.

This dialog box will not appear if you have checked the Do not convert graphics on page change box |765⟩ on the Page Format dialog tab |765⟩ on the Page Settings dialog box |751⟩.

NOTE

- At any time, you can select Abort to cancel the conversion. This may result in some associated files being left unconverted and as a result page playback may be affected.
- If associated files are set to read-only then they will not be converted.
- If you have configured either of the mismatch controls in the Playout group box |668⟩ on the Page Format dialog tab |765⟩ on the Page Settings dialog box |751⟩, resulting playout on the selected channel may appear incorrectly. Anomalies may include page backgrounds being rescaled to match the new aspect ratio and page elements in the foreground being moved out of position. Cel animations may also playback differently due to a change in frame rate associated with a new video standard.

SEE ALSO

Page Settings dialog box |751⟩
Page Format dialog tab |765⟩
Video standards and aspect ratios on a page-by-page basis |549⟩

9.28 Convert to Shaped Video dialog box [CLARITY]

Only available with Clarity systems that feature a clip volume.

The software utilises the additive method of keying when displaying compiled video clips. If you know that the video clip was compiled from an image sequence had the key data factored into the image colour data, you can convert the video clip to display shaped video. The conversion of a video clip containing a key data factored into the image colour data is achieved using the Convert to Shaped Video dialog box. To display the Convert to Shaped Video dialog box, follow the steps below:

1. Display the Clarity Explorer by selecting File> |378⟩Clarity Explorer |382⟩.
2. Browse to the desired folder containing the video clip that you want to process.
3. Select the video clip, then right click and select Process>Convert to Shaped Video from the shortcut menu |368⟩ that appears. The Convert to Shaped Video dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

603   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
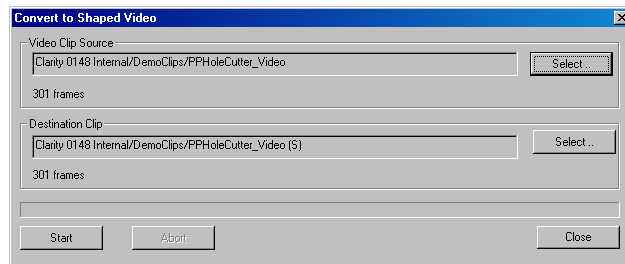
The clip path and name is displayed in the Video Clip Source group box 738 and the destination clip appears in the Destination Clip group box 737, its name appended with (S), indicating that the resulting video clip created from the process will contain shaped video.

9.28.1 Abort button

Abort the conversion at any time by clicking on the Abort button.

NOTE

If the operation is aborted, no destination video clip will be written.

9.28.2 Destination Clip group box

Displays the clip path and name of the destination video clip that will contain the shaped video. Click on Select to select an new or alternative destination clip. The Clip Explorer 362 is displayed where you can select a new or alternative clip.

9.28.3 Start button

Select Start to start to conversion process. The progress of the operation is indicated by the progress bar above.

9.28.4 Video Clip Source group box

Displays the clip path and name of the video clip that you want to process. Click on Select to select a new or alternative video clip. The Clip Explorer 362 is displayed where you can select a new or alternative clip.

9.29 Copying dialog box

The Copying dialog box is displayed when cutting, copying and pasting files using the Clarity Explorer 362.
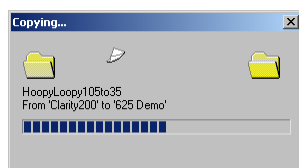
Its shows the progress of pasting operations for any available file types visible via the Clarity Explorer 362. Select Cancel if available to cancel the operation.

9.30 Copy From dialog box

The Copy From dialog box enables the copying of graphic elements and settings from a selected page to the current page open in the Graphic Edit window [260]. To display the Copy From dialog box, follow the step below:

- Select Edit> [384] Copy From [386]. The Copy From dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
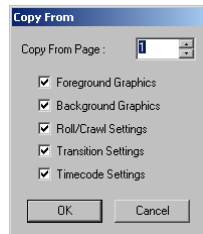
9.30.1 Background Graphics check box

Check the Background Graphics box to copy all background graphics from the page selected using the Copy From Page increment box [605].

9.30.2 Copy From Page increment box

Enter the page from which you want copy from in the increment box or use the increment and decrement buttons to jog the value up or down.

9.30.3 Foreground Graphics check box

Check the Foreground Graphics box to copy all foreground graphics from the page selected using the Copy From Page increment box [605].

9.30.4 Roll/Crawl Settings check box

Check the Roll/Crawl Settings box to copy all foreground animation [440] settings shown in the Page List [252] from the page selected using the Copy From Page increment box [605].

9.30.5 Timecode Settings check box

Check the Roll/Crawl Settings box to copy all timecode settings shown in the Page List [252] from the page selected using the Copy From Page increment box [605].

9.30.6 Transition Settings check box

Check the Roll/Crawl Settings box to copy all page transition settings shown in the Page List [252] from the page selected using the Copy From Page increment box [605].

9.31 Copy Clarity Job dialog box

The Copy Clarity Job dialog box enables the copying of jobs with the .PPJ extension created using the CG Tools software. Native Pixel Power .PPJ job files created using CG Tools products can be copied to and from the host system, networked Clarity system units, a networked drive or removable media.

To display the Copy Clarity Job dialog box, follow the step below:

- Select File> ⌐378⌐Copy Clarity Job ⌐381⌐. The Copy Clarity Job dialog box is displayed.

The Copy Clarity Job dialog box contains three dialog tabs. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Description	Clarity	PREP
Advanced ⌐606⌐	Complex, but inherently flexible user interface, available with previous versions of the Copy Clarity Job dialog box. It enables the specification of job copy attributes in the same manner as older versions of the Copy Clarity Job dialog box, but without the availability of multiple destination copy configuration (this is now dictated by the Clarity Server configuration; you must use the Basic dialog tab ⌐612⌐ instead).	■	■
Basic ⌐612⌐	Simpler interface for copying job content to one or more destination machines. This copy process uses the information that has already been configured using the Clarity Severs dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐.	■	■
Package ⌐614⌐	Enables specification of a job and its entire contents be copied into a single directory. This job contains special information that then allows the directory to be copied anywhere onto any system and still load without problem.	■	■

SEE ALSO

Copy Job_a.ppj from Machine A to Machine B using Machine A ⌐502⌐
Copy Job_b.ppj from Machine B to Machine A using Machine A ⌐503⌐
Copy Job_c.ppj from Machine C to Machine B using Machine A ⌐504⌐

9.31.1   Advanced dialog tab

To configure job copying attributes using a more complex, but inherently flexible user interface, follow the steps below:

- Select the Advanced dialog tab on the Copy Clarity Job dialog box. The Advanced dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

NOTE

Using this dialog box to copy jobs does NOT require access to ANY Clarity Server information configured using the Clarity Severs dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐ on EITHER the local or host system. **All**

information regarding job copy attributes has to be configured and as a result knowledge of how the source job and its content are located on the host system is vital to ensure that the source job can be copied correctly without any errors.

9.31.1.1 Analyse Source Job button

After you have configured all of the required options on the Advanced, Basic or Package dialog tab, select the Analyse Source Job button to check that the job can be copied correctly without any errors. Essentially, the software performs the first part of a job copy and reports the status of the analysation within the Job Copy Status dialog box 675 .

As a brief synopsis, the source jobs is analysed with the following processes:

- opens job and report either successful or unsuccessful opening;
- check graphic styles for texture usage;
- check text styles within job for font and texture usage;
- check logos used within job;
- check custom key protect images used within job;
- check graphics on individual pages within job and report status for each page;
- check video clips on backgrounds on individual pages within job and report status for each page;
- check audio clips on backgrounds on individual pages within job and report status for each page.

After the above have been completed, job analysis is reported as complete and you should rectify any errors that have been reported.

9.31.1.2 Copy Job button

After you have configured all of the required options on the Advanced or Basic dialog tab and have performed an analysis of the job using the Analyse Source Job button 607 , you can start the job copy by selecting Copy Job to proceed.

The Job Copy Status dialog box 675 is displayed and the progress of the job copy is reported within this dialog box. If the job cannot be found or loaded because it has been deleted; there are transient networking problems or the job is deemed to be corrupt, then the following warning message is displayed.

Select OK to close the message. The job copy fails and you must rectify the situation before attempting to copy the job again.

9.31.1.3 Copy Associated Files group box

Ensure that the Copy Associated Files box is checked to copy any files associated with the source job to the destination machine. The controls in the Copy Associated Files group box enable configuration of how associated files are copied. You can select to copy associated clips 607 and configure how file paths are treated. You can also configure how the software reacts to situations 609 where associated files of the same name appear on the destination machine.

9.31.1.3.1 Copy Associated Clips group box

Ensure that the Copy Associated Clips box is checked to copy any clips associated with the source job to the destination machine. The controls in the Copy Associated Clips group box are enabled.

The controls in the Copy Associated Clips group box enable configuration of how video and audio clips are copied to the destination machine. The group box displays warning messages about the status of the destination machine, making it obvious when you cannot copy clips due to permissions reasons. This was introduced because it was often unclear that upon selecting the destination for the job, the entire clip section at the bottom would be greyed out, without any real explanation as to why. If there are restrictions, they are indicated by a message that appears above the Clip Destination Type group box.

Message	Cause
DESTINATION CLIP ACCESS DENIED	The Do not accept clips option [712] is set on the Clip Store Emulation dialog tab [710] on the User Preferences dialog box [809] on the destination machine, stopping clip files being copied to the emulated clip store when jobs featuring associated clips are copied to the local machine.
DESTINATION ACCEPTS HEADER AND BROWSE ONLY	The Accept only header and browse frame option [712] is set on the Clip Store Emulation dialog tab [710] on the User Preferences dialog box [809] on the destination machine, stopping clip files being copied to the emulated clip store when jobs featuring associated clips are copied to the local machine.

All information about the availability of clip stores, emulated clips stores and level of clip acceptance is queried from the destination using COM/DCOM. Therefore, pulling of clips from a clip store or pushing of clips to a clip store or emulated clip store is only possible when a COM/DCOM connection is possible. The Custom PC Drive option is always available, and if the path to the emulated clip store at the destination is known, then this can be entered in the text box and the same end result achieved.

Clip Destination Type group box

The Clip Destination Type group box enables you to explicitly select how clips are copied to the destination machine. You can select to copy to a physical Clarity clip store, to an emulated clip store or to a custom PC drive. Select and configure one of the following options:

a)   Select the Clarity Clip Store option to copy clips to a physical Clarity clip store on the destination machine. This option will only be available if the destination machine has a clip store. If the destination machine [609] features multiple physical clip stores (volumes), select the desired volume using the adjacent drop-down list box.

b)   Select the Emulated Clip Store option to copy clips to the emulated clip store on the destination machine. Again, this option will only be available if the destination machine indicates that it supports an emulated clip store. The path to the clip store is automatically filled after querying the destination and is not editable by the user. An emulated clip store on the destination machine can be configured using the Clip Store Emulation dialog tab [710] on the User Preferences dialog box [809].

c)   Select the Custom PC Drive option to copy clips to a custom PC drive on the destination machine. This is the same as the old method of copying clips to a machine without clips, and the path selected is stored in the destination job file to enable the clips to be found. With this option selected, clips will be copied to a folder called Clips inside the destination job path.

If it is desirable for clips to be written to a location on the destination machine other than the default Clips folder, then check the Use Job Path For PC Path box. The text box adjacent to the Custom PC Drive is enabled. Enter the file path in the adjacent text box of the drive and folder on the destination system that you want to write clips to or select the Browse button. After selecting Browse, the Browse for Folder dialog box is displayed.
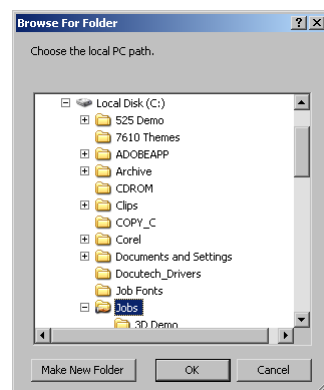
Browse to the drive and folder that you want to write clips to, then select OK to revert back to the Copy Clarity Clip dialog box.

Clip Copy Mode group box

If the destination is a real Clarity clip store, then the software will only let you select the entire clip. If the destination is

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   608

Copyright © 2000-2006 Pixel Power Ltd.

not a real Clarity clip store and the destination machine has indicated that it only accepts header and browse frames, then that is all you will be allowed to select. Select the Entire Clip option to copy the entire clip or select the Header & Browse Frame Only option to copy just the header and browse frame.

9.31.1.3.2   Overwrite group box

If during the copying process, associated files of the same name are encountered in the destination location, the software will do one of four things depending on the selections made in the Overwrite group box.

Confirm Overwrite radio button

Select the Confirm Overwrite option to display a message every time an associated file that has the same name is encountered, prompting whether to overwrite the selected file or continue, leaving the existing file intact.

No Overwrite radio button

Select the No Overwrite option to leave associated files with the same name intact.

Overwrite If Modified radio button

Select the Overwrite If Modified option to overwrite associated files only if the existing file is older than the new file.

Overwrite radio button

Select the Overwrite option to overwrite any existing files without prompting.

9.31.1.4   Destination group box

The controls in the Destination group box enable the selection of the job to be written to or overwritten and how the paths are written to the destination job during the copy process.

9.31.1.4.1   Drive Path box

Displays the source job drive path that is combined with the drive defined using the Local Map text box 611 if the Remote option 611 is selected.

9.31.1.4.2   Connection Status label

Displays whether the host system conducting the job copy operation can connect to the destination system or machine. A DCOM connection is required to ascertain clip hosting options.

Label	Description
Connected	Currently connected to the destination system or machine.
Connection Failed	Failed to connect to the destination system or machine. This may be due to the system not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

SEE ALSO

Enabling DCOM for the CG Tools software application on HOST systems 1066

9.31.1.4.3   Job Path text box and Browse button

Enter the path of the destination .PPJ job file that you want to write to or overwrite using the Job Path text box. Alternatively, select Browse to display the Source/Destination dialog box 801 where a destination job can be selected.

609   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.31.1.4.4 Local, Remote and Auto radio buttons

Use the Local, Remote and Auto options to select how the destination job file paths are written during the copy process.

Option	Description
Local	Select the Local option if the destination job is located on the local machine (see bold section below). With this option selected, all paths within the job are written as literal e.g. `C:\Mypics\Mypic1.ppj` will be copied in `C:\Mypics\Mypic1.ppj`. **The term Local not necessarily imply a physical local location, just that if the destination job is opened by the local machine, all of the associated files would be accessed successfully.**
Remote	Select the Remote option if the destination job is located on a remote machine. With this option selected, all paths within the job are mapped. An initial mapping is created by replacing any instances within paths of the drive defined using the Local Map text box [611] with the portion of the job's drive path shown in the Drive Path box [609]. During the copy process, the software will request mappings for any associated files found in the job that are not on drives that have already been mapped. **The term Remote does not necessarily imply a physical remote location, just that if the destination job is opened by the local machine, some or all of the associated files would NOT be accessed successfully due to paths being invalid for the local machine.**
Auto	Select the Auto option to let the software automatically decide how to treat destination job file paths. If the Job Path [609] features a mapped drive `C:\Mypics\Mypic1.ppj`, any file paths within the job are treated as Local automatically. If the Job Path [609] features a Universal Naming Convention (UNC) path e.g `\\Jobserver\D\3DDemIBC2004\IBC2004_3D.ppj`, any file paths within the job are treated as Remote automatically.

9.31.1.4.5 Local Map text box

If the Remote option [610] is selected, select the drive that will append the drive path listed in the Drive Path box [609].

9.31.1.4.6 Machine label

Displays the DNS network name of the destination machine.

9.31.1.4.7 Retry button

Select the Retry button to initiate a connection to the destination system or machine if an attempt to connect has already failed.

9.31.1.5 Source group box

The controls in the Source group box enable the selection of the job to be copied [611] and how the paths contained within that source job [611] are treated during the copy process.

9.31.1.5.1 Drive Path box

Displays the source job drive path that is combined with the drive defined using the Local Map text box [611] if the Remote option [611] is selected.

9.31.1.5.2   Connection Status label

Displays whether the host system conducting the job copy operation can connect to the source system or machine. A DCOM connection is required to ascertain clip hosting options.

Label	Description
Connected	Currently connected to the source system or machine.
Connection Failed	Failed to connect to the source system or machine. This may be due to the system not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

SEE ALSO

Enabling DCOM for the CG Tools software application on HOST systems ⌐1068⌐

9.31.1.5.3   Job Path text box and Browse button

Enter the path of the source .PPJ job file that you want to copy using the Job Path text box. Alternatively, select Browse to display the Source/Destination dialog box ⌐801⌐ where a source job can be selected.

9.31.1.5.4   Local, Remote and Auto radio buttons

Use the Local, Remote and Auto options to select how the source job file paths are treated during the copy process.

Option	Description
Local	Select the Local option if the source job is usable (see bold section below) on the local machine. With this option selected, all paths within the job are treated as literal e.g. `C:\Mypics\Mypic1.ppj` will be looked for in `C:\Mypics\Mypic1.ppj`. **The term Local not necessarily mean that the source job is located on the local machines' hard drive, just that if opened by the local machine, all of the associated files would be accessed successfully.**
Remote	Select the Remote option if the source job is not usable (see bold section below) by the local machine. With this option selected, all paths within the job are mapped. An initial mapping is created by replacing any instances within paths of the drive defined using the Local Map text box ⌐611⌐ with the portion of the job's drive path shown in the Drive Path box ⌐610⌐. During the copy process, the software will request mappings for any associated files found in the job that are not on drives that have already been mapped. **The term Remote does not necessarily imply a physical remote location, just that if the source job is opened by the local machine, some or all of the associated files would NOT be accessed successfully due to paths being invalid for the local machine.**
Auto	Select the Auto option to let the software automatically decide how to treat source job file paths. If the Job Path ⌐611⌐ features a mapped drive `C:\Mypics\Mypic1.ppj`, any file paths within the job are treated as Local automatically. If the Job Path ⌐611⌐ features a Universal Naming Convention (UNC) path e.g `\\Jobserver\D\3DDemIBC2004\IBC2004_3D.ppj`, any file paths within the job are treated as Remote automatically.

9.31.1.5.5   Local Map text box

If the Remote option ⌐611⌐ is selected, select the drive that will append the drive path listed in the Drive Path box ⌐610⌐.

9.31.1.5.6   Machine label

Displays the DNS network name of the source machine.

611   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.31.1.5.7   Retry button

Select the Retry button to initiate a connection to the source system or machine if an attempt to connect has already failed.

9.31.2   Basic dialog tab

To configure job copying attributes using a simpler interface so that job content can be copied to one or more destination machines, utilising the information that has already been configured in the Clarity Severs dialog tab 655 on the Global Preferences dialog box 654, follow the steps below:

- Select the Basic dialog tab on the Copy Clarity Job dialog box. The Basic dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

9.31.2.1   Analyse Source Job button

After you have configured all of the required options on the Advanced, Basic or Package dialog tab, select the Analyse Source Job button to check that the job can be copied correctly without any errors. Essentially, the software performs the first part of a job copy and reports the status of the analysation within the Job Copy Status dialog box 675.

As a brief synopsis, the source jobs is analysed with the following processes:

- opens job and report either successful or unsuccessful opening;
- check graphic styles for texture usage;
- check text styles within job for font and texture usage;
- check logos used within job;
- check custom key protect images used within job;
- check graphics on individual pages within job and report status for each page;
- check video clips on backgrounds on individual pages within job and report status for each page;
- check audio clips on backgrounds on individual pages within job and report status for each page.

After the above have been completed, job analysis is reported as complete and you should rectify any errors that have been reported.

9.31.2.2   Copy Job button

After you have configured all of the required options on the Advanced or Basic dialog tab and have performed an analysis of the job using the Analyse Source Job button ⌐607⌐, you can start the job copy by selecting Copy Job to proceed.

The Job Copy Status dialog box ⌐675⌐ is displayed and the progress of the job copy is reported within this dialog box. If the job cannot be found or loaded because it has been deleted; there are transient networking problems or the job is deemed to be corrupt, then the following warning message is displayed.

Select OK to close the message. The job copy fails and you must rectify the situation before attempting to copy the job again.

9.31.2.3   Copy Job As text box

To specify a new name for the copied job, enter the desired name in the Copy Jobs As text box.

9.31.2.4   Select the destination machine(s) that you wish to copy the job to group box

The controls in this group box enable the selection of a destination Clarity Server ⌐613⌐ and location ⌐613⌐ on that server.

9.31.2.4.1   Destination Name drop-down list boxes

Using the Destination Name drop-down list box, select the destination Clarity Server that you want to copy to from the list of available servers. After selection, unless the Use Automatic Extra Destinations box ⌐614⌐ is checked, an additional drop-down list box is added below, enabling the selection of an additional destination Clarity Server if desired.

9.31.2.4.2   Destination Location drop-down list boxes

Using the Destination Location drop-down list box, select the destination location on the selected Clarity Server that you want to copy to from the list of available folders. After selection, unless the Use Automatic Extra Destinations box ⌐614⌐ is checked, an additional drop-down list box is added below, enabling the selection of an additional destination on the Clarity Server if desired.

9.31.2.5   Source Job list boxes

The Source Job list boxes list available Clarity Servers and any jobs that are contained in known job path directories. The list boxes use an extensible file list very similar to that used by the Clarity Explorer ⌐362⌐.

The left-hand list box lists the Clarity Servers that have been added using the Clarity Servers dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐. Select the desired Clarity Server that you want to copy a job from. The status of known servers is shown using the same display methodology as that used by the Clarity Explorer. See Available locations, colour coding of locations and location status ⌐365⌐ for more information.	
Once a Clarity Server is selected, the host system interrogates the server for defined job path directories, utilising the defined job paths and drive mapping combination configured for that server. This may take some time. Server job paths are configured using the Job Path Configuration group box ⌐661⌐ on the Server Properties dialog sub-tab ⌐659⌐ on the Clarity Servers dialog tab ⌐655⌐ on the Global Preferences dialog box ⌐654⌐. Select the desired directory (job path) that contains the job that you want to copy.	

Available sub-directories are shown within the named directory (job path).	
The right-hand list box displays jobs that are contained in the selected directory (job path). Select a job from those available.	

9.31.2.6 Use Automatic Extra Destinations check box

If, for the selected Clarity Server, you have configured extra Clarity Servers to be copied to using the Copy to other servers group box |659⟩ on the Job Copy Settings dialog sub-tab |657⟩ on the Clarity Servers dialog tab |655⟩ on the Global Preferences dialog box |654⟩, check the Use Automatic Extra Destinations check box to copy the selected job to these additional Clarity Servers.

NOTE

This setting overrides the ability to select additional individual Clarity Server destinations and locations using the controls in the Select the destination machine(s) that you wish to copy the job to group box |613⟩.

9.31.3 Package dialog tab

Job packaging enables a job and all associated job content (cutouts, clips, fonts etc) to be copied to a single location. This then enables the package folder containing the job and any associated job content as well as sub-folders containing job content to be moved at will to a new location on another server or system. The file paths within the job that reference associated files are edited so that they become relative paths. This means that associated job content can always be located, irrelevant of where the job is opened from.

Please note the following important information:

- any fonts that are required by the job are ALWAYS copied to a `Job Fonts` folder at the root of the package folder;
- any clips that are required by the job are ALWAYS copied to a `Clips` folder at the root of the package folder;
- any associated files other than fonts or clips are copied to a sub folder structure within the package folder that is identical to the origin source folder structure (see the example for more information);
- once a job that has been packaged is opened and saved for the first time using the CG Tools software, it CEASES to contain relative paths, meaning that all associated job content is referenced in the normal way as with normal jobs and as such the job cannot be copied in the same way as a packaged job; it must be copied using the Copy Clarity Job dialog box |605⟩.

To configure job copying attributes so that a job and its entire contents be copied into a single directory, follow the steps below:

- Select the Package dialog tab on the Copy Clarity Job dialog box. The Package dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   614

Copyright © 2000-2006 Pixel Power Ltd.

9.31.3.1   Analyse Source Job button

After you have configured all of the required options on the Advanced, Basic or Package dialog tab, select the Analyse Source Job button to check that the job can be copied correctly without any errors. Essentially, the software performs the first part of a job copy and reports the status of the analysation within the Job Copy Status dialog box 675.

As a brief synopsis, the source jobs is analysed with the following processes:

- opens job and report either successful or unsuccessful opening;
- check graphic styles for texture usage;
- check text styles within job for font and texture usage;
- check logos used within job;
- check custom key protect images used within job;
- check graphics on individual pages within job and report status for each page;
- check video clips on backgrounds on individual pages within job and report status for each page;
- check audio clips on backgrounds on individual pages within job and report status for each page.

After the above have been completed, job analysis is reported as complete and you should rectify any errors that have been reported.

9.31.3.2   Destination Package Settings group box

The controls in the Destination Package Settings group enable configuration of how and where the destination job is packaged to. You can specify the path where the job and is associated job content will be packaged to 616, the name for the job package 616, whether to include clips 616 and whether these clips are browse frames only 615. Also, you can decide whether to zip the job and associated job content 616, whether to delete the source files 616 after zipping and specify to maintain the full job path in the job package 616.

9.31.3.2.1   Browse frame clips only check box

If you have selected to include clips in the job package by checking the Include Clips box 616, check the Browse frame clips only box to ensure that only browse frame representations of clips are included and not full size clips.

NOTE

This setting creates a small .PPV file that contains just the clip header information and the selected browse frame. This means that the non-clip capable machine can still preview, edit and use the job with all the necessary information available, but without using large amounts of disk space or requiring massive amounts of network bandwidth during the copy.

9.31.3.2.2   Create Zip Archive check box

To ensure that the job and all associated content is zipped into a single .ZIP archive once the files have been packaged to the desired location, check the Create ZIP Archive box. The Delete source files after zipping check box 616 is enabled.

NOTE

A copy of WINZIP® is not required on the host system as the CG Tools software uses its own zip algorithm.

9.31.3.2.3   Delete source files after zipping check box

If you have selected to create a ZIP archive from the job package by checking the Create ZIP Archive box 616, check the Delete source files after zipping box to ensure that the source files are deleted from the destination directory, leaving only the .ZIP archive.

9.31.3.2.4   Include Clips check box

To ensure that any clips used in the job are included in the job package, check the Include Clips box. The Browse frame clips only check box 615 is enabled.

9.31.3.2.5   Maintain full job path in package check box

When a job package is created, by default the job is always placed at the top level of the package (folder level) to make it easier to find when passing the package around. To ensure that the job file is kept in the same folder path as it was in the source location, check the Maintain full job path in package box.

9.31.3.2.6   Package Job As text box

To specify a new name for the job package, enter the desired name in the Package Job As text box. This name will the be used by the job AND destination folder and additionally the ZIP file if the Create ZIP Archive box 616 is checked.

9.31.3.2.7   Select the directory to package the job into text box

Enter the directory path where you want to write the packaged job to in the Select the directory to package the job into text box. Alternatively, select Browse to display the Browse for Folder dialog box.
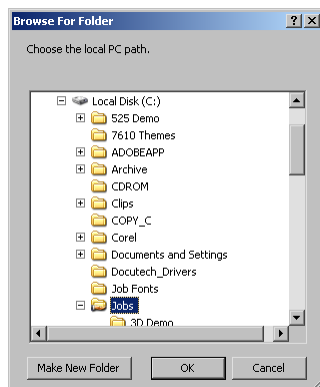
Browse to the drive and folder where you want to package the job to, then select OK to revert back to the Package dialog tab 614.

9.31.3.3   Package Job button

After you have configured all of the required options and have optionally performed an analysis of the job using the Analyse Source Job button 607, you can start the job package process by selecting Package Job to proceed.

The Job Copy Status dialog box 675 is displayed and the progress of the job copy is reported within this dialog box.

There should be very few situations where the following message is displayed:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   616

Copyright © 2000-2006 Pixel Power Ltd.
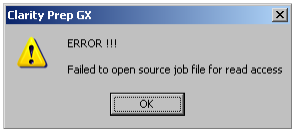
The selected job will always be found if the job is located using the job paths and drive maps configured for the selected Clarity Server (meaning the job MUST exist as it is shown in the Source Job list box in the Basic group box [617] in the Source Job To Create Package From group box [617]).

However, if you have specified a job using the controls in Advanced group box [618] and the job path cannot be resolved, there are transient networking problems or the job is deemed to be corrupt, then the warning message may be displayed. Select OK to close the message. The job package fails and you must rectify the situation before attempting to package the job again.

9.31.3.4   Source Job To Create Package From group box

The controls in the Source Job To Create Package From group box enable a source job to be packaged. There are two methods to achieve this:

a)   Use the controls in the Basic group box [617], enabling the selection of a source job easily, using job path information associated with any Clarity Servers defined using the Clarity Servers dialog tab [655] on the Global Preferences dialog box [654].

b)   Use the controls in the Advanced group box [618], enabling the selection of a source job explicitly located by a user defined path (using the same controls as the Source group box [610] on the Advanced dialog tab [606]), without using any job path information associated with any Clarity Servers that have been configured.

9.31.3.4.1   Basic group box

The Source Job list boxes list available Clarity Servers and any jobs that are contained in known job path directories. The list boxes use an extensible file list very similar to that used by the Clarity Explorer [362].

The left-hand list box lists the Clarity Servers that have been added using the Clarity Servers dialog tab [655] on the Global Properties dialog box [654]. Select the desired Clarity Server that you want to select a job from. The status of known servers is shown using the same display methodology as that used by the Clarity Explorer. See Available locations, colour coding of locations and location status [365] for more information.	
Once a Clarity Server is selected, the host system interrogates the server for defined job path directories, utilising the defined job paths and drive mapping combination configured for that server. This may take some time. Server job paths are configured using the Job Path Configuration group box [661] on the Server Properties dialog sub-tab [659] on the Clarity Servers dialog tab [655] on the Global Properties dialog box [654]. Select the desired directory (job path) that contains the job that you want to package.	
Available sub-directories are shown within the named directory (job path).	
The right-hand list box displays jobs that are contained in the selected directory (job path). Select a job from those available.	3d_bbc.ppj 3FieldJob_64.ppj
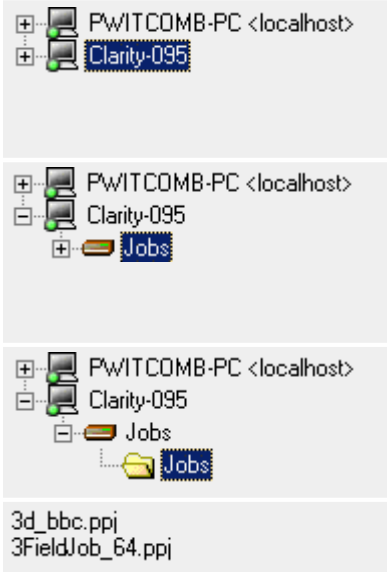
NOTE

Once you have selected the desired job that you want to package, you can then configure the options in the Destination Package Settings group box [615].

9.31.3.4.2   Advanced group box

The controls in the Advanced group box enable the selection of the job to be packaged and how the paths contained within that source job are treated during the package process.

Drive Path box

Displays the source job drive path that is combined with the drive defined using the Local Map text box if the Remote option [611] is selected.

Job Path text box and Browse button

Enter the path of the source .PPJ job file that you want to package using the Job Path text box. Alternatively, select Browse to display the Source Job dialog box [801] where a source job can be selected.

Local, Remote and Auto radio buttons

Use the Local, Remote and Auto options to select how the source job file paths are treated during the package process.

Option	Description
Local	Select the Local option if the source job is usable (see bold section below) on the local machine. With this option selected, all paths within the job are treated as literal e.g. `C:\Mypics\Mypic1.ppj` will be looked for in `C:\Mypics\Mypic1.ppj`. **The term Local not necessarily mean that the source job is located on the local machines' hard drive, just that if opened by the local machine, all of the associated files would be accessed successfully.**
Remote	Select the Remote option if the source job is not usable (see bold section below) by the local machine. With this option selected, all paths within the job are mapped. An initial mapping is created by replacing any instances within paths of the drive defined using the Local Map text box with the portion of the job's drive path shown in the Drive Path box [610]. During the package process, the software will request mappings for any associated files found in the job that are not on drives that have already been mapped. **The term Remote does not necessarily imply a physical remote location, just that if the source job is opened by the local machine, some or all of the associated files would NOT be accessed successfully due to paths being invalid for the local machine.**
Auto	Select the Auto option to let the software automatically decide how to treat source job file paths. If the Job Path [611] features a mapped drive `C:\Mypics\Mypic1.ppj`, any file paths within the job are treated as Local automatically. If the Job Path [611] features a Universal Naming Convention (UNC) path e.g. `\\Jobserver\D\3DDemIBC2004\IBC2004_3D.ppj`, any file paths within the job are treated as Remote automatically.

Local Map text box

If the Remote option [611] is selected, define the drive that will append the drive path listed in the Drive Path box [610].

Machine label

Displays the DNS network name of the machine that is hosting the job.

Connection Status label

Displays whether the host system conducting the job package operation can connect to the system or machine containing the job. A DCOM connection is required to ascertain clip hosting options.

Label	Description
`Connected`	Currently connected to the source system or machine.
`Connection Failed`	Failed to connect to the source system or machine. This may be due to the system not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

Retry button

Select the Retry button to initiate a connection to the system or machine hosting the job if an attempt to connect has already failed.

SEE ALSO

Enabling DCOM for the CG Tools software application on HOST systems [1068]

9.32 Create A Custom Animation dialog box

The Create Custom Animation dialog box enables you to create new, named, custom animations.

- To display the Create Custom Animation dialog box, select New Effect on the Animation Marker dialog box [565].

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
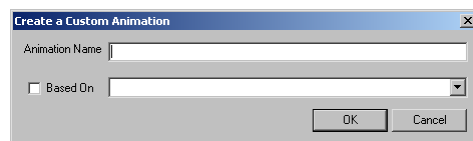
SEE ALSO

Changes to Custom Animation implementation for CG Tools version 7.1.0.6 [465]

9.32.1 Animation Name text box

Enter the name of the new custom animation using the Animation Name text box. The name does NOT have be explicit as custom animations with the same name are supported. Custom animation text files are named sequentially in the order that they are created. For example, the first custom animation that you create will have a corresponding file with the name `001.TXT`, the tenth will be named `010.TXT` and so on.

Custom animations created in the current session are saved after selecting OK. Custom animations created in the current job are stored in a HIDDEN folder beneath the folder where the job file is located, similar to the background update files also used by some jobs.

For example, if the job is located in:

`C:\MyJobs\MyCustomJob.ppj`

then the custom animations for that job will be stored in the following folder path:

`C:\MyJobs\MyCustomJob\Custom Animations`

For each animation named and created using the Create A Custom Animation dialog box, and empty .TXT file will be created in the relevant location as documented above. At this point, after selecting OK, the text file will contain only the name of the animation but no animation key frame data. Subsequent manipulation of the element within the Graphic Edit window [260] will result in the .TXT file containing all of the mathematical information required to replay the animation during preview and playout.

NOTE

To see HIDDEN folders beneath the folders where the job files are located, you must configure Windows to display hidden folders. This is not normally necessary as all maintenance of custom animations should be conducted using the CG Tool software.

ms-its:C:\WINDOWS\Help\folderop.chm::/win_fcab_show_file_extensions.htm

9.32.2 Based On check box and drop-down list box

If you have already created a custom animation that you want to copy and then modify, ensure that the Based On box is checked, then select the animation using the Based On drop-down list box and enter new name using the Animation Name text box [619].

9.33 Create Cel Animation From Picture dialog box

The selection of an image sequence for compilation into a cel animation (.CEL) is achieved using the Create Cel Animation From Picture dialog box.

- To display the Create Cel Animation From Picture dialog box, select Graphics> [395] Cels / Video>Create Cel Animation [404]. The Create Cel Animation From Picture dialog box is displayed.
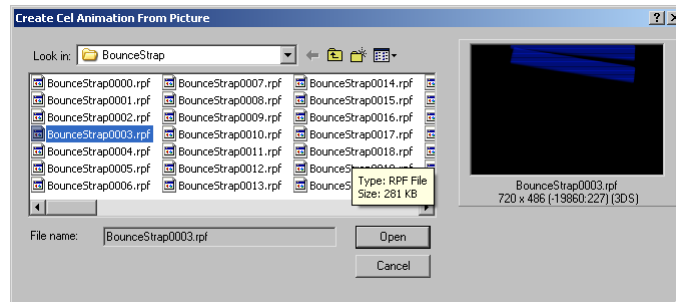
1. Browse to location where the image sequence is located.
2. Select the first image in the sequence.
3. Select Open to load the sequence and return to the application where configuration of cel compilation attributes using the Cel Creation control tab [271] on the Graphic Tools [266] can be achieved.

9.34 Destination File Already Exists dialog box [CLARITY]

The Destination File Already Exists dialog box is displayed when copying clips from a Clarity clip store to a local or network hard disk. Is enables precise control over how files are written if existing clips of the same name exist in the paste location on the local or network location.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
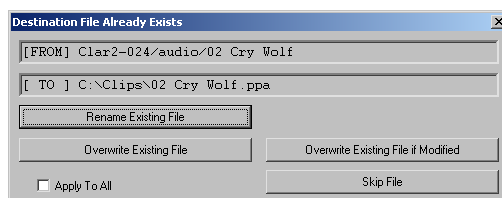
9.34.1 <destination file path> text box

Displays the destination file path on the selected local or network drive.

9.34.2 <source file path> text box

Displays the source file path on the selected Clarity clip drive volume.

9.34.3 Apply To All check box

To ensure that the selected operation is used for all subsequent file conflicts, check the Apply To All box.

9.34.4 Overwrite Existing File button

Select Overwrite Existing File to overwrite the destination file with the same name, ignoring the fact that the source file may have a later date/time stamp.

9.34.5 Overwrite Existing File If Modified button

Select Overwrite Contents If Modified to overwrite the destination file with the same name if the source file has a later date/time stamp.

9.34.6 Rename Existing File button

Select Rename Existing File to rename the file shown in the <source folder path> text box 620 if an existing file of the same name has been encountered.

9.34.7 Skip File button

Select Skip Folder to cancel the paste operation for the current file listed in the <source file path> text box 620.

9.35 Destination Folder Already Exists dialog box [CLARITY]

The Destination Folder Already Exists dialog box is displayed when copying folders from a Clarity clip store to a local or network hard disk. Is enables precise control over how folders are written if existing folders of the same name exist in the paste location on the local or network location.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

Destination Folder Already Exists	
[FROM] Clar2-024/audio/	
[TO] C:\Clips\audio\	
Rename Existing Contents	Rename Existing Folder
Overwrite Existing Contents	Overwrite Contents if Modified
☐ Apply To All	Skip Folder
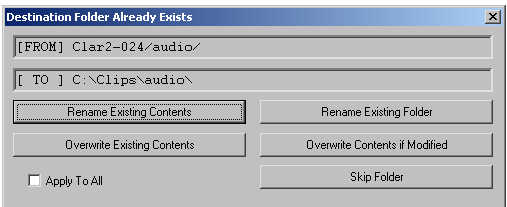
9.35.1 <destination folder path> text box

Displays the destination folder path on the selected local or network drive.

9.35.2 <source folder path> text box

Displays the source folder path on the selected Clarity clip drive volume.

9.35.3 Apply To All check box

To ensure that the selected operation is used for all subsequent folder conflicts, check the Apply To All box.

9.35.4   Overwrite Contents If Modified button

Select Overwrite Contents If Modified to overwrite destination content with the same name if the source content has a later date/time stamp.

9.35.5   Overwrite Existing Contents button

Select Overwrite Existing Contents to overwrite destination content with the same name, ignoring the fact that the source content may have a later date/time stamp.

9.35.6   Rename Existing Contents button

Select Rename Existing Contents to rename source content if existing content of the same name have been encountered.

9.35.7   Rename Existing Folder button

Select Rename Existing Folder to rename the folder shown in the <u><source folder path> text box</u> 621 if existing folder(s) of the same name have been encountered.

9.35.8   Skip Folder button

Select Skip Folder to cancel the paste operation for the current folder listed in the <u><source folder path> text box</u> 621.

9.36   Drive Map dialog box

Enables the matching of a local drive path on the selected Clarity Server to a network accessible UNC (Universal Naming Convention). This enables remote Clarity Servers to access job content on the local Clarity Server.

To display the Drive Map dialog box, follow the steps below:

- Select <u>Add</u> 657 on the <u>Drive Maps dialog sub-tab</u> 656 on the <u>Clarity Servers dialog tab</u> 655 on the <u>Global Preferences dialog box</u> 654. The Drive Map dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   622

Copyright © 2000-2006 Pixel Power Ltd.
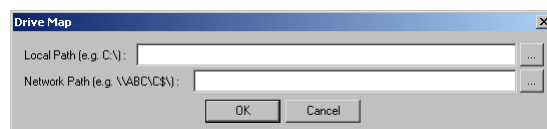
9.36.1 Local Path text box and browse button

Enter the local path where the desired job content is located on the local Clarity Server. Alternatively, select the adjacent browse button and navigate to the folder on the local drive via My Computer. After selecting browse, the Browse for Folder dialog box is displayed.
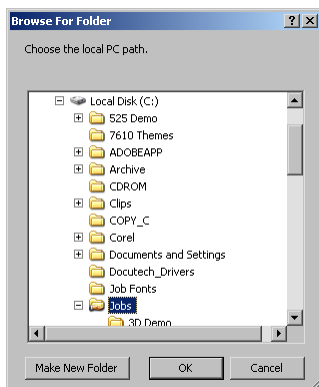
Browse to the local drive and folder via My Computer, then select OK to revert back to the Drive Map dialog box.

9.36.2 Network Path text box and browse button

Enter the desired UNC network path that can be used by remote Clarity Servers to access the local drive path specified using the Local Path text box 623 . Alternatively, select the adjacent browse button and navigate to the folder on the local drive via My Network Places. After selecting browse, the Browse for Folder dialog box is displayed.
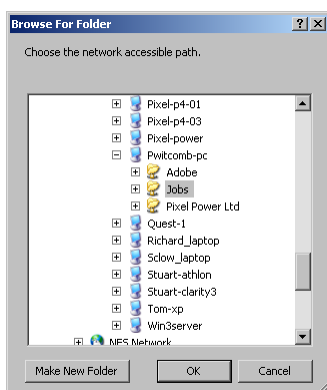
Browse to the local drive and folder via My Network Places, then select OK to revert back to the Drive Map dialog box.

9.37 Edit Format String dialog box

The Edit Format String dialog box enables the definition of a new digital clock or date clock format to suit your individual preferences. There are two variants of the dialog box.

- The version shown below is shown when the browse button adjacent to the Format drop-down list box is selected on the Digital Clock control tab 280 on the Graphic Tools. 266

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
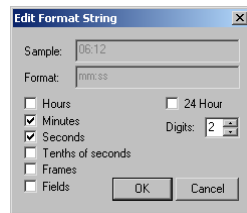
- The version shown below is shown when the browse button adjacent to the Format drop-down list box is selected on the Date clock control tab [279] on the Graphic Tools. [266]

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

SEE ALSO

9.37.1   Format box

Displays the format of the current digital or date clock for reference e.g. `mm:ss`, `dd/mm/yy`.

9.37.2   Sample box

Displays a sample of the current digital or date clock for reference e.g. `17.15`, `18/02/05`.

9.37.3   Digital clock settings

9.37.3.1   24 hour check box

Check the 24 Hour box to display the format string in 24 hour format.

9.37.3.2   Digits increment box

Click within the Digits increment box and enter the desired number of digits (`0-9`) for the left-most clock field or use the increment and decrement buttons to jog the value up or down.

9.37.3.3   Fields check box

Check the Fields box to display video fields (`ii`).

9.37.3.4 Frames check box

Check the Frames box to display video frames (`ff`).

9.37.3.5 Hours check box

Check the Hours box to display hours (`hh`).

9.37.3.6 Minutes check box

Check the Minutes box to display minutes (`mm`).

9.37.3.7 Seconds check box

Check the Seconds box to display seconds (`ss`).

9.37.3.8 Tenths of Seconds check box

Check the Tenths of Seconds box to display tenths of a second (`tt`).

9.37.4 Date clock settings

9.37.4.1 Day check box

Check the Day box to display the day of the month (`dd`).

9.37.4.2 Full check box

Check the Full box to display the century (`yyyy`). (This option has no effect unless the Year 626 box is checked)

9.37.4.3 Month check box

Check the Month box to display the name or number of the month (`mm`).

9.37.4.4 Month/Day order check box

Check the Month/Day order box to display the month before the day of the month.

9.37.4.5 Name check box

Check the Name box to display the name of the month instead of the number (`mmmm`). (This option has no effect unless the Month box 625 is checked.)

9.37.4.6 Suffix check box

Check the Suffix box to display the ordinal suffix of the day of the month i.e. 1st, 2nd, etc.

9.37.4.7   Weekday check box

Check the Weekday box to display the name of the day of the week (dddd).

9.37.4.8   Year check box

Check the Year box to display the year (yy).

9.38   Edit Logo Character Glyph dialog box

The Edit Logo Character Glyph dialog box enables the selection of a new image (Glyph [1130]) for the selected logo character in the selected logo font.

- To display the Edit Logo Character Glyph dialog box, select the desired preview in the Preview list on the Logo Fonts control tab [287] and then select the Define Logo tool or shortcut menu command [323]. The Edit Logo Character Glyph dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
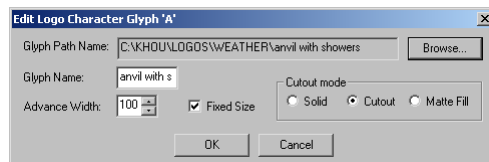
9.38.1   Advance Width increment box

(5-500%)

The advance width for a logo character defines the distance between subsequent characters as a percentage of the scaled picture width. An advance width of 100% will leave no space between solid logo characters. Enter the percentage in the Advance Width increment box or use the increment and decrement buttons to jog the value up or down.

9.38.2   Cutout mode group box

Select either Solid, Cutout and Matte Fill from the Cutout mode group box.

Type	Description
Solid	Insert as a solid picture.
Cutout	Use the key saved with a picture as a cutout for the logo. If no matte was saved with the picture, then this option will have no effect.
Matte Fill	Use the key saved with a picture as a matte filled shape. This will use the logo picture key channel to define a shape which will be filled by the current foreground drawing colour and shading.

NOTE

These settings can also be configured using the Logos and Logo Fonts shortcut menu [323].

9.38.3   Fixed Size check box

By default, the picture will be resized to the current text height before is was inserted as a logo. To ensure that the logo is displayed at its full size, check the Fixed Size box.

NOTE

This settings can also be configured using the Logos and Logo Fonts shortcut menu ⌐323¬.

9.38.4 Glyph Name text box

Edit or enter a new name for the logo character in the Glyph Name text box.

9.38.5 Glyph Path Name text box and Browse button

Displays the file path and filename of the current glyph. This path is not editable directly. To specify a new image to be used as the glyph, select Browse to display the Open Glyph dialog box ⌐749¬.

9.39 Edit Tabs dialog box

The configuration of text page tabulation is achieved using the Edit Tabs dialog box. The software supports up to eight user defined tab stops for each text page. Tab stops can be defined as left ⌐628¬, centre ⌐628¬ or right ⌐628¬ justified or as a decimal ⌐628¬ tab, with any character used as the decimal alignment character. The eight default tab stops are spaced equally between the left and right margins. This default ⌐627¬ tab setting can be restored at any time.

- To display the Edit Tabs dialog box where text page tabulation configuration can be achieved, either select Text> ⌐408¬Format Tabs ⌐416¬ or right-click on the horizontal ruler in the Graphic Edit window ⌐260¬ and select Format Tabs ⌐261¬ from the shortcut menu that appears. The Edit Tabs dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
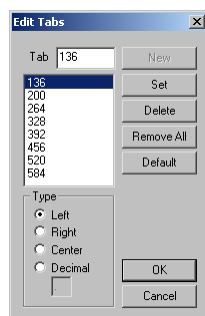
9.39.1 Default button

Select Default to restore the default tab stop settings for the current text page. After closing the dialog box, the text will be adjusted to reflect the new tab stop positions.

9.39.2 Delete button

Select on Delete to delete the selected the tab stop in the Tab list box ⌐628¬. After closing the dialog box, selected tab stop will be deleted from its specified position and the text is adjusted accordingly.

9.39.3 New button

This function is only available if there are less then the maximum 8 tab stops specified in the Tab list box. ⌐628¬

Select New to add a new tab stop to the list in the Tab list box ⌐628¬ with the current settings specified using the controls in the Type group box ⌐628¬. After closing the dialog box, a tab stop will be inserted at the specified position and the text is adjusted accordingly.

9.39.4 Remove All

When setting up custom tab stop positions, it is useful to be able to clear the existing tab stops completely. Select Remove All to clear the existing tab stops for the current job. All tab stops will be deleted from their specified positions and the text is adjusted accordingly.

9.39.5 Set button

Select Set to adjust the position of an existing tab stop selected in the Tab list box |628⁸| with the current settings specified using Tab text box |628| and the controls in the Type group box |628⁸|. After closing the dialog box, the existing tab stop is reconfigured with the new position and the text is adjusted accordingly.

9.39.6 Tab text and list box

The Tab list box shows the tab stops currently configured. The Tab text box enables the definition of a new tab stop or the editing of an existing tab stop selected in the Tab list box.

9.39.7 Type group box

The controls in this group box enable justification settings to be configured for the selected tab stop. Tab stops can be defined as left |628|, centre |628| or right |628| justified or as a decimal |628| tab, with any character used as the decimal alignment character.

9.39.7.1 Centre radio button

Select the Centre option to set the current tab stop to be centred.

9.39.7.2 Decimal radio button and text box

Select the Decimal option to set the current tab stop to be decimal. The decimal character can be defined by entering a new decimal character in the adjacent text box.

9.39.7.3 Left radio button

Select the Left option to set the current tab stop to be left-aligned.

9.39.7.4 Right radio button

Select the Left option to set the current tab stop to be right-aligned.

9.40 Edit Text Margins dialog box

The position of the left and right margins are adjustable using either the Edit Text Margins dialog box or by the dragging margin markers |261| on the horizontal ruler in the Graphic Edit window |260| using the mouse. New margin settings will affect text that is subsequently typed or subsequent justification operations. Existing text will not be affected unless it is re-justified.

- To display the Edit Text Margins dialog box where text page margin configuration can be achieved, either select Text> |408| Text Margins |416| or right-click on the horizontal ruler in the Graphic Edit window |260| and select Edit Text Margins |261| from the shortcut menu that appears. The Edit Text Margins dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
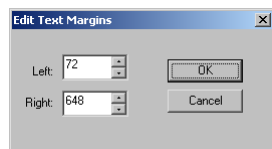
NOTE

As the margin is updated, the text page will be adjusted to reflect the new margin settings.

9.40.1 Left and right increment boxes

Edit the margin numeric values in the Left and/or Right input boxes or use the increment and decrement buttons to jog the values up or down.

9.41 Edit Video Format dialog box

The definition and editing of custom page video formats is achieved using the Edit Video Format dialog box. In addition to the default page video formats [549] defined in the software, you can configure you own custom video formats which can be applied to new and existing pages within the current job. Custom page video formats defined in this way are saved as part of the software settings and are available with all subsequent jobs.

Page video formats that are defined or edited using the Edit Video Format dialog box are in no way connected to the systems' video format and aspect ratio defined using the System Settings group box [794] on the SD Hardware Configuration dialog box [786]. In order to playout pages configured with custom page video formats, video and ratio settings must match those defined for the systems' video hardware.

- To display the Edit Video Formats dialog box where custom page video formats can be created and edited, select either New [668] or Edit [668] on the Video dialog tab [667] on the Global Preferences dialog box [654]. The Edit Video Format dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

9.41.1 Default Apsect Ratio group box
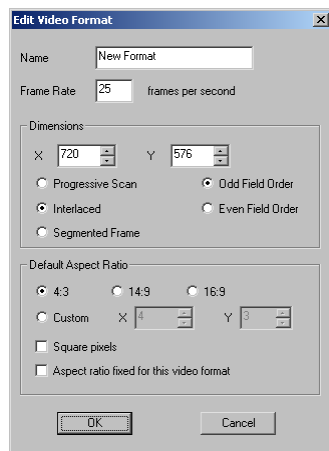
Use the controls in the Default Aspect Ratio group box to configure either a known [630] or custom [630] aspect ratio and whether the ratio is fixed [630] and uses square pixels [630].

9.41.1.1 Aspect ratio fixed for this video format check box

Check the Aspect ratio fixed for this video format box to fix the specified aspect ratio for the custom video format. Clear this box if the aspect ratio of video format can be changed after the custom video format is defined.

9.41.1.2 Aspect Ratio radio buttons

Select either the 4:3, 14:9 or 16:9 option to select the desired aspect ratio.

9.41.1.3 Custom radio button and X and Y increment boxes

If you want to configure a custom aspect ratio, select Custom and then configure the X and Y increment boxes.

9.41.1.4 Square Pixels check box

Check the Square pixels box to ensure that square pixels are used. Clear this box if the video format is to use non-square pixels.

9.41.2 Dimensions group box

Use the controls in the Dimensions group box to configure the dimensions |630|, whether the format is interlaced |630| or progressive |630| and the field order |630| for the custom video format.

9.41.2.1 Interlaced check box

Check the Interlaced box to ensure that each frame of the output video is interlaced. Each displayed picture comprises two interlaced fields: field two fills in between the lines of field one. One field displays odd lines, then the other shows even lines.

9.41.2.2 Odd and Even Field Order radio buttons

Select either the Odd or Even option to specify field order or dominance i.e. whether a field type 1 or type 2 represents the start of a new frame.

9.41.2.3 Progressive Scan check box

Check the Progressive scan box to ensure that all the lines of a picture are displayed in one continuous vertical scan. There are no fields or half frames as with interlace scanning.

9.41.2.4 Segmented Frame check box

Check the Segmented Frame box to output each frame is as odd lines followed by even lines.

9.41.2.5 X and Y increment boxes

Configure the height in lines and width of the video format using the X and Y increment boxes.

9.41.3 Frame Rate text box

In the Frame Rate text box, enter a new frame rate or edit the existing frame rate.

9.41.4   Name text box

In the Name text box, enter a new name or edit the existing name.

9.42   Export Cel Frames dialog box

The Export Cel Frames dialog box enables you to specify a folder location, image sequence name and file type for cel frames exported using the Cel Conversion Tool dialog box [593]. To display the Export Cel Frames dialog box where the first file in an image sequence can be saved, follow the steps below:

- On the Cel Conversion Tool dialog box [593], ensure that the Image Sequence option [593] is selected and then select the Browse button in the Destination Format group box [593]. The Export Cel Frames dialog box is displayed.
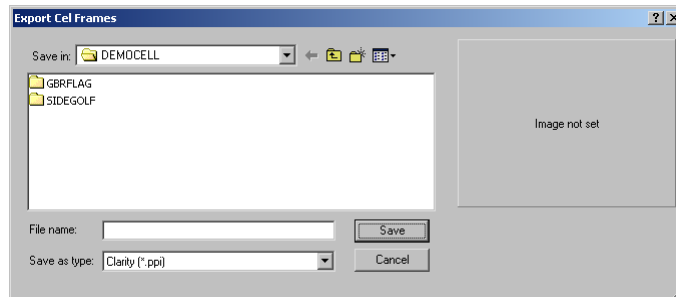
1. Select the desired image file type from the Save As Type drop-down list box.
2. Browse to a new location or where an image sequence is located.
3. Select the sequential file in a image sequence that you want to overwrite. If saving a new image sequence, enter the name of the first file in an image sequence file in the File Name text box If you are overwriting or saving a new image sequence, you must select or specify a valid starting file for the sequence that you want to save. There are conventions [506] which the software will follow when naming (saving) subsequent files in an image sequence.
4. Select Save to save the image and return to the Cel Conversion Tool dialog box [593].

SEE ALSO

Image sequence file naming conventions [506]

9.43   Export/Import Custom Animations dialog box

The Export Custom Animation or Import Custom Animation dialog boxes enable the selection of a folder and any custom animation files stored with that folder with a view to either:

- exporting custom animations currently known to the current job to another location (e.g. another Custom Animation folder on the current system or a location on another system);
- importing custom animations from another location (e.g. another Custom Animation folder on the current system or a location on another system) to make them known to the current job open in the CG Tools software.

To display the Export Custom Animation or Import Custom Animation dialog boxes, follow the steps below:

1. With the Animation Marker dialog box [565] displayed in Advanced mode, select the Export button [570] to display the Export Custom Animation dialog box or the Import button [571] to display the Import Custom Animation dialog box.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
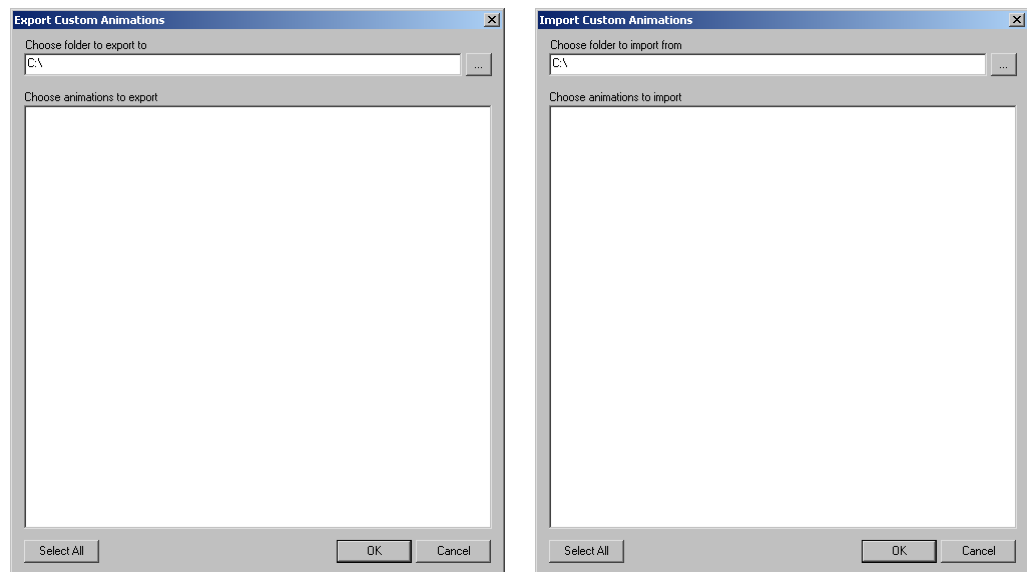
SEE ALSO

[Changes to Custom Animation implementation for CG Tools version 7.1.0.6](#) 465

9.43.1 Choose folder to export to/import from text box and Browse button

Enter the folder path where you want to import or export custom animations from/to. Alternatively, select the adjacent Browse button to browse for a location. The Browse for Folder dialog box is displayed.
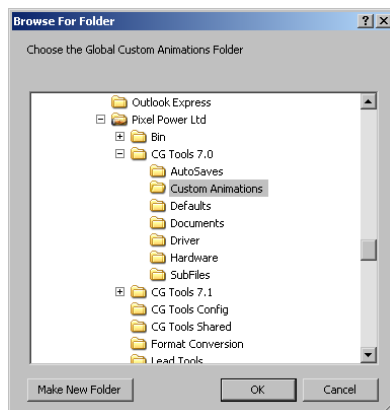
Select a new folder location and then select OK.

9.43.2 Choose animations to import/export list box

Animations that already exist that are known to the current job are listed in the Choose animations to import/export list box. Select the desired custom animations that you want to export or import. Select multiple animations if desired in the normal Windows manner using SHIFT and CTRL. When exporting or importing custom animations, those animations that are listed are sourced from the a folder beneath the folder where the current job file is located e.g. `C:\MyJobs\MyCustomJob\Custom Animations.`

NOTE

If the moves index is already used, the software will import the move to the first empty index available for the job. An exception to this rule occurs where the move has the same name and index. In this case, it will overwrite the existing move.

9.43.3   Select All button

To select all custom animations listed in the Choose animations to import/export list box `632`, select the Select button.

9.44   Export Page To File dialog box

A page must be currently open in the Graphic Edit window `260` in order to use this dialog box.

The page currently open in the Graphic Edit window can be exported to a variety of differing image types.

- To display the Export Page to File dialog box where page export can be achieved, select File> `378` Export>Export Page `382`. The Export Page To File dialog box is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

9.44.1   Auto Increment Filename check box

Check the Auto Increment Filename box to ensure that the current page is saved with a name incremental to that of the last page exported. You must specify a valid file name for the page that you want to save using the Filename text box `634`. There are conventions `500` which the software will follow when incrementing the file names of subsequently saved pages.

9.44.2   Colour Format group box

To specify what colour model the image is saved in, select either the YUV or RGB option.

9.44.3   Destination Mix Type group box

The controls in the Destination Mix Type group box enable you to specify the type of mixing that the image is saved with.

Setting	Description
Additive	Specifies that the image is converted to additive mixing before being saved.
Multiplicative	Specifies that the image is converted to multiplicative mixing before being saved.

See the Cel Playback Settings control tab `274` for more information on Additive and Multiplicative keying.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

9.44.4 File Type list box

The File Type list box enables you to select the file type of the image that you want to output to. Select the file format of the image that you want to save, depending on your requirements.

File Format	Type	Extension	Configuration Available				
			RGB [633]	*YUV* [633]	*No Key* [634]	*With Key* [634]	*Just Key* [634]
Clarity Image Format	Image	.PPI		■	■	■	■
Collage Image Format	Image	(check sum)	■		■	■	
Tagged Image File Format	Image	.TIFF	■		■	■	
Targa Bitmap	Image	.TGA	■		■	■	
Windows Bitmap	Image	.BMP	■		■	■	
JPEG Bitmap	Image	.JPG	■		■	■	
SGI Targa Bitmap	Image	.TGA	■		■	■	
VPB Quantel Bitmap	Image	.VPB		■	■	■	

9.44.5 Filename text box and Browse button

Enter the file path in the Filename text box of the image file that you want to export or select the browse button and browse for the desired image file. If the browse button is selected, the Save As dialog box [781] appears where you can browse and select the desired file. If you are saving a new page and you want to save subsequent pages with the Auto Increment Filename box checked [633], you must specify a valid file name for the page that you want to save. There are conventions [500] which the software will follow when incrementing the file names of subsequently saved pages.

9.44.6 Key Settings group box

Enables the selection of how the key or matte associated with the page is saved (with the key [634], without the key [634], or just the key [634] and whether to invert the key [634]).

9.44.6.1 Invert Key check box

If you selected either With Key [634] or Just Key [634], check the Invert Key box to invert the key/alpha channel when the page is saved.

9.44.6.2 Just Key radio button

Select Just Key option to include just the key/alpha channel with the saved page.

9.44.6.3 No Key radio button

Select the No Key option to omit the key/alpha channel from the saved page.

9.44.6.4 With Key radio button

Select the With Key option to include the key/alpha channel with the saved page.

9.44.7 Use Page name check box

Check the Use Page Name box to ensure that the current page name is used as the file name of the saved page.

9.45 Export Pages dialog box

NO pages must be currently open in the <u>Graphic Edit window</u> |260| in order to use this dialog box.

Groups of pages within the current job can be exported to a variety of differing image types. Prior to displaying this dialog box, you can optionally select pages in the <u>Page Browser</u> |251| or <u>Page List</u> |252|. If you do not select any pages in this way, you can subsequently select either to export all pages in the current job or define a custom page range.

- To display the Export Pages dialog box where multiple page export can be achieved, select <u>File></u> |378| <u>Export>Export Pages</u> |382|. The Export Pages dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
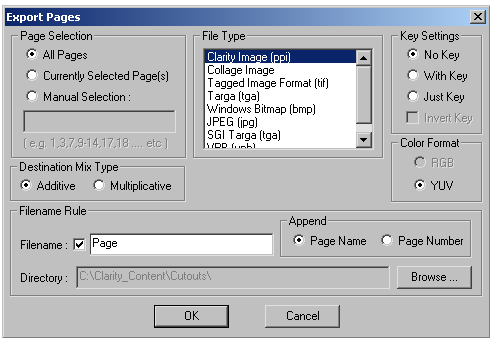
9.45.1 Colour Format group box

To specify what colour model images are saved in, select either the YUV or RGB option.

9.45.2 Destination Mix Type group box

The controls in the Destination Mix Type group box enable you to specify the type of mixing that images are saved with.

Setting	Description
Additive	Specifies that images are converted to additive mixing before being saved.
Multiplicative	Specifies that images are converted to multiplicative mixing before being saved.

See the <u>Cel Playback Settings control tab</u> |274| for more information on Additive and Multiplicative keying.

9.45.3 File Type list box

The File Type list box enables you to select the file type of images that you want to output to. Select the file format of images that you want to save, depending on your requirements.

File Format	Type	Extension	Configuration Available				
			RGB |635|	*YUV* |635|	*No Key* |637|	*With Key* |637|	*Just Key* |637|
Clarity Image Format	Image	.PPI		■	■	■	■
Collage Image Format	Image	(check sum)	■		■	■	

Tagged Image File Format	Image	.TIFF	■		■	■	
Targa Bitmap	Image	.TGA	■		■	■	
Windows Bitmap	Image	.BMP	■		■	■	
JPEG Bitmap	Image	.JPG	■		■	■	
SGI Targa Bitmap	Image	.TGA	■		■	■	
VPB Quantel Bitmap	Image	.VPB		■	■	■	

9.45.4 Filename Rule group box

Enables the selection of how exported image files are named [636] and where they are saved [637]. Exported image file names can consist of two parts and can appear using the following conventions.

```
filename_pagenumber
filename_pagename
```

The first part (`filename`) is the string entered using the Filename check box and text box [636].

The second part can be defined as either:

a) (`pagenumber`) the page number in the form _nnnn by selecting the Page Number option [636] in the Append group box [636].
b) (`pagename`) the page name as listed in the Page List [252] by selecting the Page Name option [636] in the Append group box [636].

SEE ALSO

Append group box [636]
Filename check box and text box [636]

9.45.4.1 Append group box

Enables the selection of how filenames are appended (with page names [636] or page numbers [636]).

9.45.4.1.1 Page Name radio button

Select the Page Name option to ensure that page names are used (as displayed in the Page List [252]) to append the filename defined using the Filename check box and text box [636]. If pages in Page List have not been renamed (Page> [390] Change Name [392]), files are appended using the default page number in the form _nnnn.

9.45.4.1.2 Page Number radio button

Select the Page Number option to ensure that page numbers are used in the form _nnnn to append the filename defined using the Filename check box and text box [636].

9.45.4.2 Filename check box and text box

To specify a string value that will be used as the `Filename` [636] part of image file(s) names, check the Filename box and enter a string in the adjacent text box.

9.45.4.3 Directory text box and browse button

Click on Browse to browse to a location where you want to save the page(s).

After selecting Browse, the Browse for Folder dialog box is displayed.
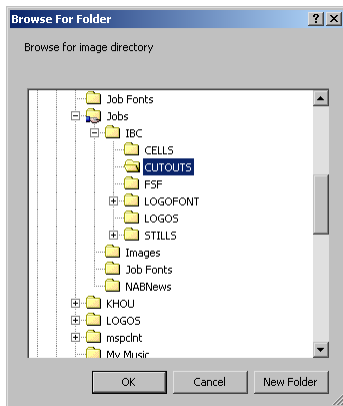
Browse to the folder where you want to save the page(s), then select OK to revert back to the Export Pages dialog box 635.

9.45.5 Key Settings group box

Enables the selection of how the key or matte associated with pages is saved (with the key 637, without the key 637, or just the key 637 and whether to invert the key 637).

9.45.5.1 Invert Key check box

If you selected either With Key 634 or Just Key 634, check the Invert Key box to invert the key when pages are saved.

9.45.5.2 Just Key radio button

Select the Just Key option to include just the key with the saved pages.

9.45.5.3 No Key radio button

Select the No Key option to omit the key from the saved pages.

9.45.5.4 With Key radio button

Select the With Key option to include the key with the saved pages.

9.45.6 Page Selection group box

Enables the selection of which pages are exported from the current job. You can specify all pages in the current job 638, currently selected pages 638 or define a custom range 638.

9.45.6.1 All Pages radio button

Select the All Pages option to export all pages in the current job.

9.45.6.2 Currently Selected Pages(s) radio button

Select the Currently Selected Page(s) option to export the pages selected in the Page Browser [251] or Page List [252].

9.45.6.3 Manual Selection radio button and text box

Select the Manual Selection option to enable the specification of a group or range of pages using the text box below. The page range conventions that apply are similar to those used when printing from Windows applications, examples of which are shown below:

Range	Description
1,2,5	Only pages 1, 2 and 5 are included in the group.
14-21	Pages 14 up to and including page 21 are included in the group.
30	Only page 30 is included in the group.
40-100	Pages 40 up to and including page 100 are included in the group.

9.46 Extended Key Editor dialog box

The Extended Key Editor dialog box enables editing of the key sequences used to perform extended key actions.

- To display the Extended Key Editor dialog box where key sequences can be edited, select Edit [640] on the Extended Keyboard Map dialog box [639]. The Extended Key Editor dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
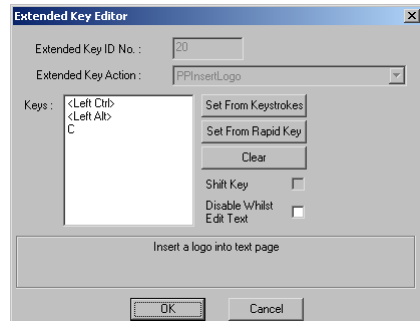
9.46.1 <key action description> box

Displays a description of the selected extended key action.

9.46.2 Clear button

Select Clear to clear the keys listed in the Keys list box [639].

9.46.3 Disable Whilst Edit Text check box

To ensure that the extended key action is NOT available when editing text elements within the Graphic Edit window 260 , check the Disable Whilst Edit Text box.

9.46.4 Extended Key Action drop-down list box

Using the Extended Key Action drop-down list box, select the extended key action that you want to edit.

NOTE

This control is only available when adding new extended key actions using the Add button 640 on the Extended Keyboard Map dialog box 639 .

9.46.5 Extended Key ID No text box

Displays the hard coded ID of the extended key action selected using the Extended Key Action drop-down list box 639 .

NOTE

This value is not editable.

9.46.6 Keys list box

Display the keystrokes used to perform the extended key action.

9.46.7 Set From Keystroke button

Select Set From Keystroke to specify the key sequence using the keyboard. After selecting Set From Keystroke, the PRESS KEY NOW indication is given and you should press the desired key sequence in the same manner as if you performing the shortcut when working normally. Press ESC to cancel the operation at any time.

9.46.8 Set From Rapid Key button

Select Set From Rapid Key to specify the key sequence using the key sequence associated to a RapidAction key on the keyboard. After selecting Set From Rapid Key, the PRESS KEY NOW indication is given and you should press the desired RapidAction key. Press ESC to cancel the operation at any time.

9.46.9 Shift Key check box

Identifies that the extended key action is a "shifted" action i.e. the key performs in a similar way to the SHIFT keys in that it has to be used with another key to perform an action.

9.47 Extended Keyboard Map dialog box

The selected extended keyboard file (.EKM) can be edited if desired. It is recommend that extended keyboard files are only edited on specific request by Pixel Power support staff as keyboard operating problems can occur if the file is not edited in the correct manner.

- To display the Extended Keyboard Map dialog box where the extended keyboard file (.EKM) can be edited, select Edit 719 on the Keyboard dialog tab 718 on the Local Preferences dialog box 696 . The Extended Keyboard Map dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
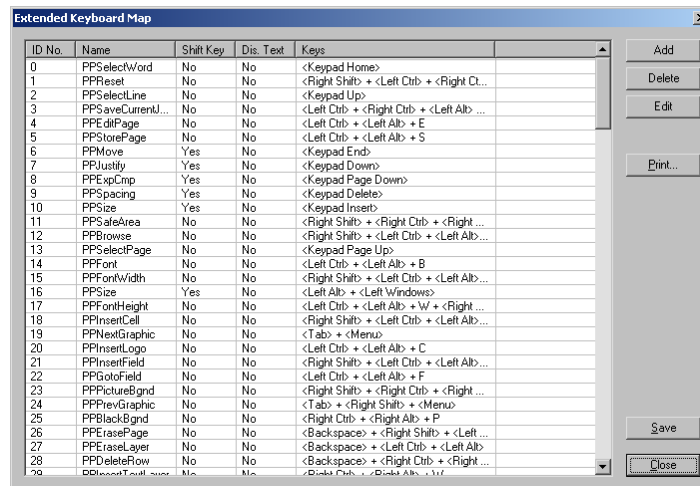
9.47.1   <keyboard map list>

The keyboard map list displays the mapped key sequences for the available extended key actions in the selected .EKM keyboard mapping file. A description of the columns is given below:

Column	Description
ID No.	Internal ID number used to reference the extended key action within the CG Tools software. This ID number cannot changed using the Extended Key Editor dialog box 638.
Name	Internal name used to reference the extended key action within the CG Tools software. This name cannot changed using the Extended Key Editor dialog box 638.
Shift Key	Identifies that the extended key action is a "shifted" action i.e. the key performs in a similar way to the SHIFT keys in that is has to be used with another key to perform an action.
Dis. Text	Identifies that the extended key action is disabled whilst editing text.
Keys	Identifies the keyboard key sequence used by the extended key action.

9.47.2   Add button

Select Add to add a new key sequence for a extended key action in the selected extended keyboard map (.EKM) file. The Extended Key Editor dialog box 638 is displayed where you add a new key sequence. Changes are only saved when the Save 641 button is selected.

9.47.3   Delete button

Select Delete to delete the selected extended key action in the <keyboard map list> from the selected extended keyboard map (.EKM) file. Changes are only saved when the Save 641 button is selected.

9.47.4   Edit button

Select Edit to edit the selected extended key action in the <keyboard map list>. The Extended Key Editor dialog box 638 is displayed where you edit the selected extended key action. Changes are only saved when the Save 641 button is selected.

9.47.5 Print button

For reference purposes, select Print to print the contents of the selected extended keyboard map (.EKM) file. The standard Windows Print dialog box is displayed.
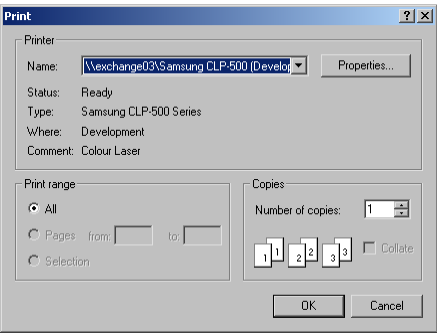
9.47.6 Save button

To ensure that any changes that you have made to the extended keyboard map (.EKM) file are saved, select Save to save the file.

9.48 Find Drive dialog box

The Find Drive dialog box is displayed on occasions when copying a Clarity job, where associated files found in the job cannot be located on drives that have already been mapped. This occurs when the Remote option is selected in the Source [611] or Destination [610] group boxes on the Clarity Job Copy dialog box [605].
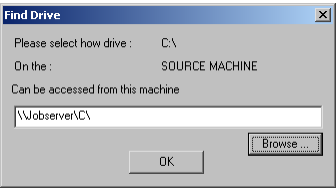
Enter the file path of the SOURCE or DESTINATION machine and drive letter or select Browse to browse to a location where the drive can be accessed from either the SOURCE or DESTINATION machine as listed above the path text box. After selecting Browse, the Browse for Folder dialog box is displayed.
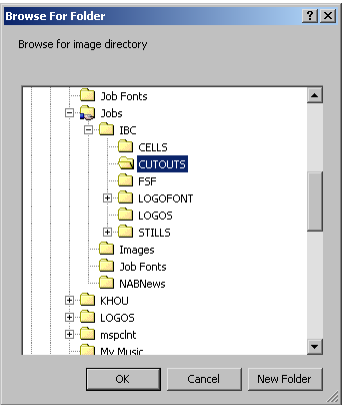
Browse to the drive on the desired machine, then select OK to revert back to the Find Drive dialog box.

9.49   Freehand Painting Texture dialog box

The insertion of texture image into the Texture Buffer mimic on the <u>Paint control tab</u> [290] on the <u>Graphics Tools</u> [266] is achieved using the Freehand Painting Texture dialog box.

- To display the Freehand Painting Texture where a image can be selected, select Load on the <u>Paint control tab</u> [290] on the <u>Graphics Tools</u> [266]. The Open Texture Picture dialog box is displayed.
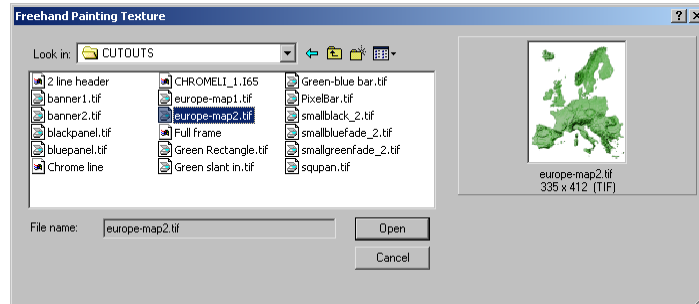
1. Browse to location where the texture image is located.
2. Select the desired image.
3. Select Open to load the image into the texture buffer on the <u>Paint control tab</u> [290].

9.50   Font Mappings dialog box

The mapping of Collage postscript and truetype fonts to Windows fonts is achieved using the Font Mappings dialog box.

- To display the Font Mappings dialog box, select <u>Options></u> [429] <u>Collage Import>Font Mapping</u> [432]. The Font Map Settings dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
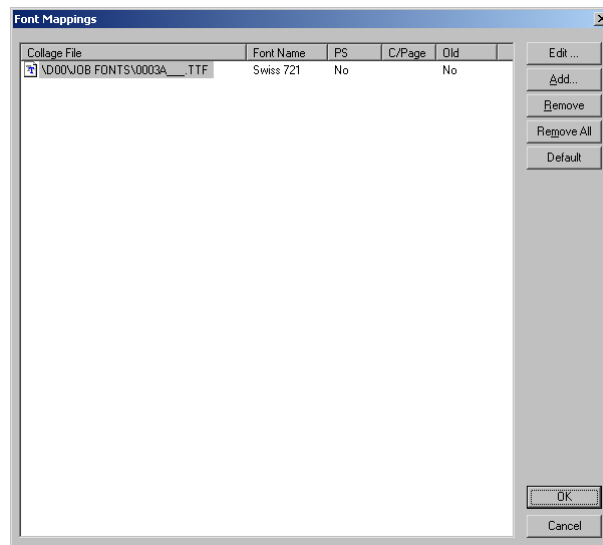
9.50.1 <font mapping> window

Displays Collage fonts that have been mapped to local Windows fonts. An explanation of the information columns is given below:

Column	Description
Collage File	Collage font file selected for mapping.
Font Name	Local Windows font file selected for mapping to the selected Collage font file.
PS	Indicates that the Collage font file is a Postscript file (.PFB). This setting is configured using the Postscript / Converted Postscript Font check box |645| on the Font Map Settings dialog box |644|.
C/Page	Indicates the code page |1131| used by the mapped Windows font. The specification of a code page is achieved using the Code Page Encoded Font check box |644| and Code Page list box |644| on the Font Map Settings dialog box |644|.
Old	Indicates that the font is configured so that the CG Tools software will use the older font height calculation method. This setting is configured using the Use Old Font Height Calculation Method check box |645| on the Font Map Settings dialog box |644|.

9.50.2 Add button

Click on Add to add a Collage font file to be mapped. The Select Collage Font To Map To dialog box |796| is displayed where you can select a Collage font, after which you are asked to select a Windows font using the Select Windows Font For dialog box |799|. The Font Map Settings dialog box |644| is then displayed, enabling you to configure any other additional mapping options.

9.50.3 Default button

Select Default to reset the CG Tools software to use the default font mapping shipped with the software. This maps the standard 500 Bitstream fonts shipped with Collage to TrueType equivalents on the Windows local system running the CG tools software. The default mappings are stored in the `DefaultMapping.txt` file in the CG Tools installation folder e.g. `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Defaults`.

NOTE

One you have selected the default mapping, you will not be able edit any of the default mappings until you have an extra mapping using the Add |643| button.

9.50.4 Edit button

Select Edit to edit the selected font mapping in the <font mapping> window |643|. The Font Map Settings dialog box |644| is displayed.

NOTE

You cannot edit or remove any of the default mappings stored in the `DefaultMapping.txt` file in the CG Tools installation folder e.g. `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Defaults` until you have added one of your own mappings. All buttons are then enabled after this has been completed.

9.50.5 Remove All button

Select Remove All to remove the all font mappings in the <font mapping> window |643|.

NOTE

You cannot edit or remove any of the default mappings stored in the `DefaultMapping.txt` file in the CG Tools installation folder e.g. `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Defaults` until you have added one of your own mappings. All buttons are then enabled after this has been completed.

9.50.6 Remove button

Select Remove to remove the selected font mapping in the <u><font mapping> window</u> ⌐643¬.

NOTE

You cannot edit or remove any of the default mappings stored in the `DefaultMapping.txt` file in the CG Tools installation folder e.g. <u>`C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Defaults`</u> until you have added one of your own mappings. All buttons are then enabled after this has been completed.

9.51 Font Map Settings dialog box

The editing of Collage fonts that are already mapped is achieved using the Font Map Settings dialog box.

- To display the Font Map Settings dialog box, select <u>Edit</u> ⌐643¬ on the <u>Font Mappings dialog box</u> ⌐642¬. The Font Map Settings dialog box is displayed. The Font Map Settings dialog box is also displayed after selecting Add on the <u>Font Mappings dialog box</u> ⌐642¬ and then specifying a Collage font using the <u>Select Collage Font To Map To dialog box</u> ⌐796¬ and a Windows font using the <u>Select Windows Font For dialog box</u> ⌐799¬.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
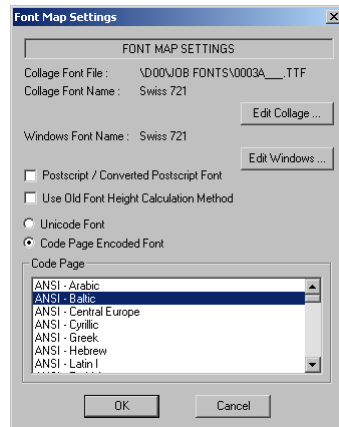
9.51.1 Code Page Encoded Font check box

To ensure that the Collage font is mapped to the selected Windows font using a Windows code page, ensure that the Code Page Encoded Font box is checked. Select the desired code page available on the local system using the <u>Code Page list box</u> ⌐644¬.

9.51.2 Code Page list box

If you have selected the Code Page Encoded Font option, select the desired <u>code page</u> ⌐1130¬ that will be used by the mapped Windows font.

9.51.3 Edit Collage button

Select Edit Collage to change the selected Collage font for another. The <u>Select Collage Font To Map To dialog box</u> ⌐796¬ is displayed where you can select another Collage font.

9.51.4 Edit Windows button

Select Edit Windows to change the selected Windows font for another. The Select Windows Font For dialog box [799] is displayed where you can select another Windows font.

9.51.5 Postscript / Converted Postscript Font check box

To specify that the Collage font is a postscript font, ensure that the Postscript / Converted Postscript Font box is checked.

9.51.6 Unicode Font check box

To ensure that the Collage font is mapped to the selected Windows font using the Unicode Font Transmission (UTF) standard, ensure that the Unicode box is checked.

9.51.7 Use Old Font Height Calculation Method check box

The Potential Font Size Problem dialog box is displayed when opening jobs that use fonts that exhibit incorrect font size calculation. If the job was last saved with a version of the CG Tools software prior to v 4.7.1.0, you may need to take the remedial action, as described on the dialog box.

9.52 Font Warning dialog box

The Font Warning dialog box is displayed when loading jobs that reference fonts that cannot be found on the local system. Prior to the display of this dialog box, the Warning: Analysis of the associated files for this job has found problems dialog box [825] should have been displayed, prompting that there are missing fonts and the names of those fonts. See Font handling during job load [478] for more information on this.

Depending on how or if the fonts are located on the local system, the Font Warning dialog box appears differently.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
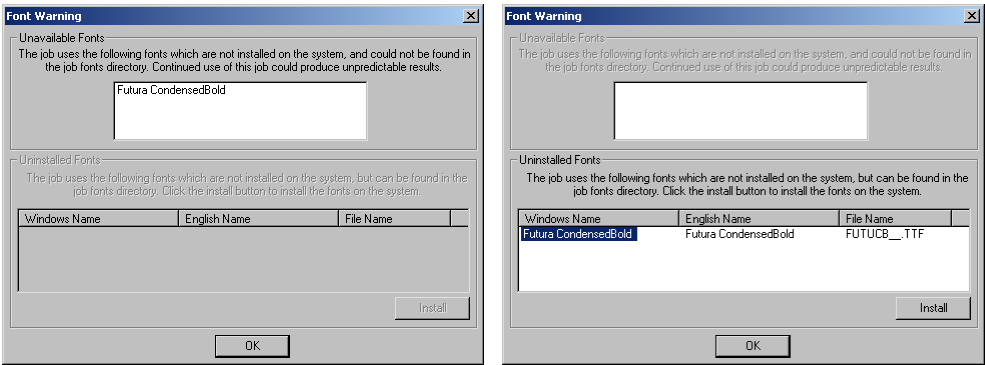
SEE ALSO

Font handling during job load [478]

9.52.1 Unavailable Fonts group box

The Unavailable Fonts group box displays those fonts that are not installed on the host system (in the `C:\WINNT\FONTS` folder) and which the software COULD NOT find the associated necessary font files for in the `C:\JOB FONTS` folder.

9.52.2 Uninstalled Fonts group box

The Uninstalled Fonts group box displays those fonts that are not installed on the host system (in the `C:\WINNT\FONTS` folder) and which the software COULD find the associated necessary font files for in the `C:\JOB FONTS` folder. Those fonts for which the software has found font files can then be installed to the `C:WINNT\FONTS` folder by selecting Install.

9.52.3 Install button

Select Install to install any fonts listed in the Uninstalled Fonts group box to the Windows font folder e.g. `C:WINNT\FONTS`.

9.53 FTP Connection Details dialog box

Enables the configuration of an FTP server.

- To display the FTP Connection Details dialog box, select Add 664 or Modify 664 on the FTP dialog tab 713 on the User Preferences dialog box 809.
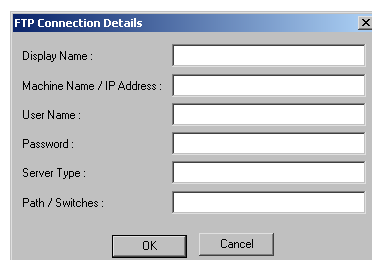
The available controls are documented in the table below:

Control	Parameter
Display Name text box	Display name that will be shown in the Clarity Explorer 362 window.
Machine Name/IP Address text box	DNS name or IP address of the server.
User Name text box	User name (if required).
Password text box	Password (if required).
Server Type text box	Server type of the server in the Server Type text box (optional). This can usually be left blank unless you explicitly know the type. Currently, the software supports FTP servers running on the following platforms: Unix (e.g. Solaris, Linux, etc.), Windows NT (support DOS style listing), VMS.
Path/Switches text box	Add any additional paths or switches that will be parsed when the FTP connection is started.

Once you have configured your FTP server, select OK to save any changes you have made.

9.54 Get/Put Clip dialog box [CLARITY]

The Get/Put Clip dialog box enables video and/or audio to be recorded to/from a connected VTR or recorded from a connected video feed.

The term GET refers to the operation of recording a clip from a source; PUT refers to the operation of playing back a clip stored the selected clip volume to a connected VTR.

To display the Get/Put Clip dialog box, follow the steps below:

1. Display the Clarity Explorer by selecting File> 378 Clarity Explorer 382.
2. Browse to the desired folder on the selected clip drive where you want to record a clip (GET) or the folder containing the video clip that you want to playback (PUT) to a connected VTR.

3. Perform one of the following actions:

- If you are overwriting (GET) an existing clip on the clip drive, select the clip, then right-click and select Record Clip from the shortcut menu |368⟩ that appears.
- If you are playing back (PUT) an existing clip on the clip drive to a connected VTR, select the clip, then right-click and select Put Clip To Tape from the shortcut menu |368⟩ that appears.
- If you are recording a new clip on the clip drive, ensure that no clips are selected, then right-click and select Record Clip from the shortcut menu |368⟩ that appears.

In all cases, the Get/Put Clip dialog box is displayed. The dialog box is split into two dialog tabs (Record/Get From Tape and Playback/ Put To Tape). The dialog tab shown is dependant on the action that you performed to display the dialog box. Both dialog tabs feature an almost identical feature set and as a result are explained as a single entity. Where items are specific to a particular tab, they will be labelled at the top of the relevant topic. Some user interface items are not shown on the dialog tab below but ARE explained in subsequent sections.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
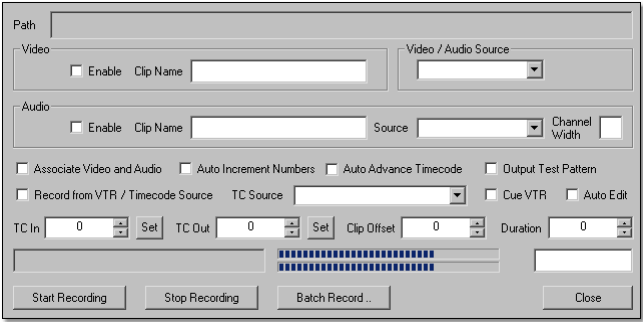
Additionally, the VTR Control Dialog control box |359⟩ may be displayed in conjunction with the Get/Put Clip dialog box when the Record from VTR / Timecode Source box |651⟩ or Playback to VTR / Timecode Source box |651⟩ is checked. In these situations, it will appear docked at the bottom of the dialog box to facilitate control of a connected VTR.

9.54.1 <status> box

Displays the current status after the Start Playback |652⟩ or Start Recording |652⟩ button has been selected. The possible values that can be displayed are documented below:

Status	Description
(clip n of n) Recording	Currently recording (GET) one or more clips from a connected VTR or live source. The recording of more than one clip can only be achieved using the Batch Record button |650⟩.
(clip n of n) Playing	Currently playing back (PUT) one or more clips to a connected VTR from the selected clip volume. The playback of more than one clip can only be achieved using the Batch Record button |650⟩.
(n clip selected)	The Enable boxes are checked in either the Audio |648⟩ and Video |653⟩ group boxes.
(n clip selected) Aborted	You have aborted the current operation by selecting the Stop Playback button |652⟩ or the Stop Recording button |652⟩.

9.54.2 <progress indicator bars>

Displays the current progress of the selected operation. The two progress bars have particular relevance when performing a batch record. In normal recording and playback situations, the two progress bars display the amount of the selected clip that has yet to be recorded or played back. When performing a batch record, the top progress indicator bar displays how far the total batch record operation has progressed (i.e proportionally how many of the clips specified in the batch record file have been completed thus far). The bottom progress indicator bar displays the amount of the current clip that has yet to be recorded.

SEE ALSO

Batch Record button |650|
Batch recording |451|

9.54.3 <progress box>

`(record/playback progress in HH:MM:SS:FF)`

Display the progress in HH:MM:SS:FF of the of the record (GET) or playback (PUT) operation for the current clip.

9.54.4 Associate Video and Audio check box

Only available on the Record/Get From Tape dialog tab when the Enable box is checked in the Video |653| AND Audio |648| group boxes.

When recording a clip from a connected VTR or video feed (GET), check the Associate Video and Audio box to automatically create an audio clip which will be associated with the video clip.

The Clip Name text box |649| in the Audio group box |648| is filled with the same name as the video clip, but is appended with `(A)` instead of `(V)`. You are freely able to edit this name but we recommend that you use the default naming convention to make associated clip identification easier. With a clip name set, you can then subsequently select an audio source using the Source drop-down list box |649| and the number of channels to record using the Channel Width text box |648|.

9.54.5 Audio group box

The controls in the Audio group box enable the selection of whether you are going to get/put audio |649| and the resulting name of the clip |649| if you are recording a clip to a clip drive (GET). Also displays the status |648| once recording/playback has been actioned using the Start Playback |652| or Start Recording |652| buttons.

9.54.5.1 <status indicator>

Displays the status of the current GET or PUT operation after selecting the Start Playback |652| or Start Recording |652| buttons.

Status	Colour	Description
REC	**RED**	Shown when recording an audio clip FROM a connected VTR or video feed (GET).
CUE	**ORANGE**	Shown when playing back a selected audio clip TO a connected VTR (PUT) and the software is waiting for the in timecode specified using the TC IN text box |652|.
PLAY	**GREEN**	Shown when playing back a selected audio clip TO a connected VTR (PUT).

9.54.5.2 Channel Width text box

`(number of audio channels n)`

To specify the number of audio channels that you want record, enter the desired number in the Channel Width text box. The number of channels that can be specified is dependant on the audio source selected using the Source drop-down list box |649|.

Selected audio source	Available channel width	
	Mono	Stereo
Embedded A/B (V)/(K) 1/2/3/4 Input	1	2
AES/EBU A/B 1/2/3/4	1	2

9.54.5.3   Clip Name text box

`((clip name (A))`

Displays the name of the audio clip that will be recorded to or played back from. If you selected an audio clip in the Clip Explorer prior to the display of the <u>Get/Put Clip dialog box</u> |646|, then the clip name will already be present in this box. If this is not the case, enter the name of the audio clip that you would like to record to in the current folder shown in the <u>Path text box</u> |651|. The audio clip name is automatically appended with the `(A)` suffix, making clip identification easier.

NOTE

- The Clip Name text box is disabled if you have selected a batch record file using <u>Batch Record button</u> |650|.
- If you have checked the <u>Associate Video and Audio box</u> |648|, the name of the audio clip in the Clip Name text box will be automatically matched to the video clip name specified in the <u>Video group box</u> |653|.

9.54.5.4   Enable check box

To enable the recording (GET) of a new audio clip to the current folder location, the overwriting (GET) of an existing audio clip selected from the current folder or the recording (PUT) of existing clip to a connected VTR, ensure that the Enable box is checked. The <u>Clip Name text box</u> |653| and <u>Video/Audio Source drop-down list box</u> |654| are enabled.

Also enables the following controls where relevant:

<u>Associate Video and Audio check box</u> |648| (Only available on the Record/Get From Tape dialog tab)

NOTE

The <u>Clip Name text box</u> |653| is not enabled if you have checked the <u>Associate Video and Audio box</u> |648|.

9.54.5.5   Source drop-down list box

`(alphanumeric audio source)`

Use the Source drop-down list box to select an available audio source to be associated with the desired video source. For more information on the audio sources available with your system unit, see <u>X and Y audio sources</u> |447|.

NOTE

Only AES/EBU and Embedded audio sources on the SAME channel are available, selected using the <u>Video/Audio Source drop-down list box</u> |654|.

9.54.6   Auto Advance Timecode check box

Only enabled when the <u>Playback to VTR / Timecode Source box</u> |651| or <u>Record from VTR / Timecode Source box</u> |651| is checked.

Optionally, after putting a range of video frames to a connected VTR, the values in the <u>TC IN</u> |652| and <u>TC OUT</u> |652| increment boxes can be incremented by the number of frames played back from the selected clip. This ensures that a another subsequent PUT operation will not overwrite existing frames on the tape and those frames that are put will follow the last frame put to the VTR i.e maintaining frame continuity within a video frame sequence. To ensure that the above occurs, make sure that the Auto Advance Timecode box is checked.

9.54.7   Auto Edit check box

Only available on the Playback/Put To Tape dialog tab when the <u>Playback to VTR / Timecode Source box</u> |651| is checked.

If the Auto Edit box is checked, Clarity will record the clip to tape using the VTR's audio insert edit facility, by sending the <u>TC IN</u> |652| and <u>TC OUT</u> |652| timecodes to the VTR, enabling the selected insert edit tracks (see <u>Record Enable controls</u> |360| on the <u>VTR Control Dialog control box</u> |359|), and sending an `AUTO EDIT` command, via the 9-pin interface.

9.54.8   Auto Increment Numbers check box

Only available on the Record/Get From Tape dialog tab and if the specified audio/video clip name contains numeric characters.

Check the Auto Increment Numbers box to increment the clip name after each successful recording made.

9.54.9   Batch Record button

Only available on the Record/Get From Tape dialog tab.

Select Batch Record to select a batch record file that will be used to control the recording operation. The Select Batch Record File To Open dialog box 796 is displayed where you can select a batch file to use.

SEE ALSO

Batch recording 451
Clarity batch file format 451
Avid Log Exchange (.ALE) files 452

9.54.10   Cancel Batch Mode button

Only available on the Record/Get From Tape dialog tab.

The Cancel Batch Mode button replaces the Batch Record button and is displayed after a batch record file has been selected using the Select Batch Record File To Open dialog box 796. Select Cancel Batch mode to abort the batch record and return the Get/Put Clip dialog box to its normal state (i.e the Clip Name text boxes in the Audio 648 and Video 653 group boxes are enabled again).

SEE ALSO

Batch recording 451
Clarity batch file format 451
Avid Log Exchange (.ALE) files 452

9.54.11   Clip Offset increment box

`(clip offset in HH:MM:SS:FF)`

Only available on the Playback/Put To Tape dialog tab.

When playing a clip back to be recorded to tape, the first frame within a clip from which playback will start is shown in the Clip Offset increment box. Enter the required offset in HH:MM:SS:FF or use the increment and decrement buttons to jog the values up or down.

9.54.12   Cue VTR check box

Only available when the Enable box 654 is checked in the Video group box 653 and the Playback to VTR / Timecode Source box 651 or Record from VTR / Timecode Source box 651 is checked.

If the Cue VTR box is unchecked, a subsequent GET or PUT operation will try to will start recording/playback to/from the specified VTR without cueing to the timecode value specified using the TC IN text box 652. This is useful of you want to record (GET) or playback video (PUT) a to/ from a VTR that is currently playing, without moving to a precise point. In this case, the software will not initiate any communication with the VTR transport to affect playback of the tape.

If you want the software to cue the connected VTR to the position specified using the TC IN text box 652 after initiating a GET or PUT operation, ensure that the Cue VTR box is checked.

9.54.13   Duration increment box

`(clip duration in HH:MM:SS:FF)`

The duration of the clip to be recorded (GET) or played back (PUT) is shown in the Duration increment box. Enter the required duration in HH:MM:SS:FF or use the increment and decrement buttons to jog the values up or down on. If the Record from VTR / Timecode Source box ⌐651⌐ is checked, subsequent edits to the values in the TC IN increment box ⌐652⌐ and TC OUT increment box ⌐652⌐ will affect the clip duration in the Duration increment box. This will also be the case when the Playback to VTR / Timecode Source box ⌐651⌐ is checked

9.54.14   Output Test Pattern check box

Only available on the Playback/Put From Tape dialog tab.

When playing back to a connected VTR (PUT), check the Output Test Pattern box to output a test pattern to tape.

9.54.15   Path box

`(file path on selected clip volume)`

Displays the path on the selected clip volume where clips will be recorded (GET) or played back from (PUT).

9.54.16   Playback to VTR / Timecode Source check box

Only available on the Playback/Put From Tape dialog tab.

If you are playing back (PUT) to source that is NOT timecode controlled, ensure that the Playback to VTR / Timecode Source box is cleared.

Ensure that the Playback to VTR / Timecode Source box is checked if you are playing back (PUT) to a connected VTR and you want to control the tape transport of the connected VTR using the Clarity system unit.

Before playback can be actioned using timecode, you must first select a timecode source that will receive and transmit timecode information. This will then be used by the system to control a PUT operation. This is selected using the TC Source drop-down list box ⌐652⌐.

If the VTR 1 (TC from 9-pin) or VTR 2 (TC from 9-pin) timecode source is selected, then the VTR Control Dialog control box ⌐359⌐ is displayed and docked at the bottom of the Get/Put Clip dialog box ⌐646⌐. Use the VTR Control Dialog box to control the connected VTR.

9.54.17   Record from VTR / Timecode Source check box

Only available on the Record/Get From Tape dialog tab.
Replaced with the Playback to VTR / Timecode Source check box ⌐651⌐ on the Playback/Put From Tape dialog tab.

If you are recording (GET) from a live feed or other source that is NOT timecode controlled, ensure that the Record from VTR / Timecode Source box is cleared.

Ensure that the Record from VTR / Timecode Source box is checked if you are:

a)   recording (GET) from a connected VTR and you want to control the tape transport of the connected VTR using the Clarity system unit;
b)   recording (GET) from a video feed featuring embedded audio and you want to control clip recording based on received embedded timecode.

Before recording can be actioned using timecode, you must first select a timecode source that will receive and transmit timecode information. This will then be used by the system to control a GET operation. This is selected using the TC Source drop-down list box ⌐652⌐.

If the VTR 1 (TC from 9-pin) or VTR 2 (TC from 9-pin) timecode source is selected, then the VTR Control Dialog control box ⌐359⌐ is displayed and docked at the bottom of the Get/Put Clip dialog box ⌐646⌐. Use the VTR Control Dialog box to control the connected VTR.

9.54.18 Start Playback button

Replaced by the <u>Stop Playback button</u> 652 during playback (PUT) to a connected VTR.

Select Stop Recording to stop the playback on the connected VTR.

9.54.19 Start Recording button

Replaced by the <u>Stop Recording button</u> 652 during recording (GET) from a connected VTR or live feed.

Select Start Recording to start the current recording (GET) operation.

9.54.20 Stop Playback button

Select Stop Recording to stop the playback on the connected VTR.

9.54.21 Stop Recording button

Select Stop Recording to stop the current recording operation.

9.54.22 TC IN increment box and Set button

`(timecode in reference in HH:MM:SS:FF)`

Only enabled when the <u>Playback to VTR / Timecode Source box</u> 651 or <u>Record from VTR / Timecode Source box</u> 651 is checked.

9.54.23 TC OUT increment box and Set button

`(timecode out reference in HH:MM:SS:FF)`

Only enabled when the <u>Record from VTR / Timecode Source box</u> 651 is checked.

9.54.24 TC Source drop-down list box

`(alphanumeric timecode source)`

Only enabled when the <u>Playback to VTR / Timecode Source box</u> 651 or <u>Record from VTR / Timecode Source box</u> 651 is checked.

Using the Default Timecode Source drop-down list box, select the desired timecode source that will receive and transmit timecode information which the system will then use to control an GET or PUT operation. The table below shows the list of sources available:

Source	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
VTR 1 (TC from 9-pin)	VITC, LTC, or the best timecode available supplied from a VTR connected via Channel A's VTR connector.	VTR (15-pin female D-type RS422 serial VTR/machine control)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
VTR 2 (TC from 9-pin)	VITC, LTC, or the best timecode available supplied from a VTR connected via Channel B's VTR connector.	VTR (15-pin female D-type RS422 serial VTR/machine control)	N/A, no second channel available

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   652

Copyright © 2000-2006 Pixel Power Ltd.

Source	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
LTC	SMPTE/EBU longitudinal timecode as read from the LTC pins on the relevant audio connector on the system rear panel.	AUDIO (15-pin female D-type digital audio port)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
VITC from Analog REF Input	SMPTE/EBU vertical interval timecode read from the analogue reference input video on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	REF (75BNC Analogue reference input)	REF (75BNC Analogue reference input)
VITC from Live A (V)	*Not yet supported by Clarity.*	N/A	N/A
VITC from Live A (K)	*Not yet supported by Clarity.*	N/A	N/A
VITC from Live B (V)	*Not yet supported by Clarity.*	N/A	N/A
VITC from Live B (K)	*Not yet supported by Clarity.*	N/A	N/A
Embedded TC from Live A (V)	*Not yet supported by Clarity.*	N/A	N/A
Embedded TC from Live B (V)	*Not yet supported by Clarity.*	N/A	

Information regarding the pinouts of rear panel connectors featured in the table above are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

9.54.25 Video group box

The controls in the Video group box enable the selection of whether you are going to get/put video ⌐654¬ and the resulting name of the clip ⌐653¬ if you are recording a clip to a clip drive (GET). Also displays the status ⌐653¬ once recording/playback has been actioned using the Start Playback ⌐652¬ or Start Recording ⌐652¬ buttons.

9.54.25.1 <status indicator>

Displays the status of the current GET or PUT operation after selecting the Start Playback ⌐652¬ or Start Recording ⌐652¬ buttons.

Status	Colour	Description
REC	**RED**	Shown when recording to a video clip from a connected VTR or video feed (GET).
CUE	**ORANGE**	Shown when recording a selected video clip to a connected VTR (PUT) and the software is waiting for the in timecode specified using the TC IN text box ⌐652¬.
PLAY	**GREEN**	Shown when recording a selected video clip to a connected VTR (PUT).

9.54.25.2 Clip Name text box

`((clip name (V))`

Displays the name of the video clip that will be recorded to or played back from. If you selected a video clip prior to the display of the Get/Put Clip dialog box ⌐646¬, then the video clip name will already be present in this box. If this is not the case, enter the name of the video clip that you would like to record to in the current folder shown in the Path text box ⌐651¬. The video clip name is automatically appended with the (V) suffix, making clip identification easier.

NOTE

653   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

The Clip Name text box is disabled if you have selected a batch record file using <u>Batch Record button</u> |650\.

9.54.25.3 Enable check box

To enable the recording (GET) of a new video clip to the current folder location, the overwriting (GET) of an existing clip selected from the current folder or the recording (PUT) of existing clip to a connected VTR, ensure that the Enable box is checked. The <u>Clip Name text box</u> |653\ and <u>Video/Audio Source drop-down list box</u> |654\ are enabled.

Also enables the following controls where relevant:

<u>Duration increment box</u> |651\
<u>Playback to VTR / Timecode Source check box</u> |651\ (Only available on the Playback/Put From Tape dialog tab)
<u>Record from VTR / Timecode Source check box</u> |651\ (Only available on the Record/Get From Tape dialog tab)
<u>Clip Offset increment box</u> |650\ (Only available on the Playback/Put From Tape dialog tab)
<u>Output Test Pattern check box</u> |651\ (Only available on the Playback/Put From Tape dialog tab)

9.54.26 Video/Audio Source drop-down list box

```
((Live A (V), Live A (K), Live B (V), Live B (K))
```

Use the Video/Audio Source drop-down list box to select a video source to record from (GET). The selected video source MAY additionally supply embedded audio; a subset of which can be selected using the <u>Source drop-down list box</u> |649\ in the <u>Audio group box</u> |648\.

The table below shows the video inputs available for selection:

Port	Clarity 500 rear panel connector	Clarity 100/200/300 rear panel connector
Live A (V)	Channel A Video IN (BNC labelled CHAN A, VID IN)	Channel A Video IN (BNC labelled VID IN)
Live A (K)	Channel A Key IN (BNC labelled CHAN A, KEY IN)	Channel A Key IN (BNC labelled KEY IN)
Live B (V)	Channel B Video IN (BNC labelled CHAN B, VID IN)	N/A, no second channel available
Live B (K)	Channel B Key IN (BNC labelled CHAN B, KEY IN)	N/A, no second channel available

NOTE

If you are using a single channel system, then only the Live A (V) and Live A (K) sources will be available for selection.

9.55 Global Preferences dialog box

The Global Preferences dialog box enables the configuration of a variety of global company wide settings for Clarity Servers within a networked workgroup. To display the Global Preferences dialog box where settings can be configured, follow the steps below:

- Select <u>Options></u> |429\<u>Preferences>Global Preferences</u> |430\. The Global Preferences dialog box appears.

The Global Preferences dialog box contains four dialog tabs. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of	Clarity	PREP
<u>Clarity Servers</u> |655\	Clarity Server <u>addition</u> |656\, <u>deletion</u> |656\ and <u>editing</u> |657\ and also configuration including <u>server properties</u> |659\, <u>job copy settings</u> |657\ and <u>drive maps</u> |656\.	■	■
<u>FTP</u> |664\	FTP settings including the <u>addition</u> |664\, <u>modification</u> |664\ and <u>deletion</u> |664\ of FTP servers.	■	■

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   654

Copyright © 2000-2006 Pixel Power Ltd.

Tab	Enables configuration of	Clarity	PREP
Users `665`	Global user administrator settings including the addition `666`, deletion `666` and editing `666` of users, configuration of the automation user `666` and advanced options `666` including remote user location `666` and the use of MS Windows logins `667` instead of the CG Tools software login.	■	■
Video `667`	Page format settings including default page format `668`, playout mismatch `668`, and new page configuration `668`.	■	■

SEE ALSO

Options> `429` User Preferences `430`

9.55.1   Clarity Servers dialog tab

To configure and maintain Clarity Servers, follow the steps below:

- Select the Clarity Severs dialog tab on the Global Preferences dialog box `654`. The Clarity Servers dialog tab appears.

The Clarity Servers dialog tab contains three dialog sub-tabs. The purpose of each tab is explained below:

Sub-tab	Enables
Drive Maps `656`	Configuration of drive mappings that will subsequently enable remote Clarity Servers to access job content via network accessible UNC (Universal Naming Convention) paths.
Job Copy Settings `657`	Configuration of job copy settings for the selected Clarity server including how associated files are copied `658` (in particular how clips are copied) and whether jobs are copied to other available Clarity Servers `659` at the same time.
Server Properties `659`	Configuration of Clarity Server properties including whether a server is shown in the Clarity Explorer `661`, how a server is connected to `663` and server job paths `661`. Also displays the available still store directories `660` and physical/emulated clip store availability `660` when a server is connected.

After you have configured Clarity Server properties (in particular any job paths configured using the controls in the Job Path Configuration group box `661` on the Server Properties dialog sub-tab `659`), the Missing Drive Mappings dialog box `738` may displayed.

This is displayed in circumstances where job paths have been added or edited and no corresponding drive mapping has been added using the Drive Maps dialog sub-tab `656`. We recommended that you correct the situation as soon as possible to minimise possible errors during the copying of jobs using the Basic dialog tab `612` on the Copy Clarity job dialog box `605` and when viewing Clarity Server content using the Clarity Explorer `362`.

NOTE

- In order to use the Clarity Server functionality, DCOM settings on the host Clarity Server and any remote Clarity Servers must be configured correctly. See Enabling DCOM for the CG Tools software application on HOST systems `1068` for more information.
- Configuration settings made using the controls in the Clarity Servers dialog tab are only stored when OK is selected and are only reflected when the CG Tools software is re-started.

9.55.1.1   <server> list box

Lists the local Clarity Server and any remote Clarity Servers that you have added. Clarity Server status is shown by a traffic light system of coloured indicators that are displayed to the right of the server name.

Indicator	Clarity Server status
Blue	Not connected to the selected Clarity Server.
Green	Currently connected to the selected Clarity Server.
Orange	Currently attempting to connect to the selected Clarity Server.

Indicator	Clarity Server status
Red	Failed to connect to the selected Clarity Server. This may be due to the Clarity Server not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

NOTES

- The configuration of drive mappings using the Drive Maps dialog sub-tab [656] is not dictated by connection status.
- Irrelevant of when and how a connection is initiated, a copy of the CG Tools software is started on the selected Clarity Server if the software if is NOT already running.

SEE ALSO

Connect/Disconnect button [661]
Server Connect Mode group box [663]
Server Status [663]

9.55.1.2   Add button

Select Add to add a new Clarity Server to the list. The Clarity Job Server Path dialog box [597] is displayed where you can enter the DNS network name (hostname) of the desired Clarity Server. Additionally, each server MUST be given an alias, allowing for more meaningful names, and a server can be listed more than once with differing aliases. This means that each alias can then have a different configuration e.g. one where clips are copied; one where they are not.

9.55.1.3   Delete button

Select Delete to delete the selected Clarity Server from the <server> list box [655]. A warning message is displayed asking if you are sure you want to remove the selected Clarity Server. Select OK to proceed or Cancel to abort the deletion.

9.55.1.4   Drive Maps dialog sub-tab

Drive mapping enables Clarity Servers to access job content on other Clarity Servers via network accessible UNC (Universal Naming Convention) paths. Configuration of drive maps should be completed before attempting job path configuration for the selected Clarity Server using the Job Path Configuration group box [661] on the Server Properties dialog sub-tab [659].

Drive mappings are required for any paths configured on the Server Properties dialog sub-tab [659]. These paths may include:

a)   any job paths configured using the controls in the Job Paths Configuration group box [661];
b)   the default still store directory and any additional directories shown in the Available Still Directories group box [660] (configured on the selected Clarity Server using the Still Store dialog tab [730] on the Local Preferences dialog box [696]);
c)   the emulated clip store path (if configured on the selected Clarity Server using the Clip Store Emulation dialog tab [710] on the Local Preferences dialog box [696]).

If you have adhered to the prescribed way of working (as documented in Intermediate level CG Tools user management, Clarity server and job copy configuration [128]), then its possible that you may only have to configure one drive mapping in addition to the map that locates the emulated clip store path. This is because all job content and stills are located under a single job path and the Sub Dir. check box is checked in the Job Paths Configuration group box [661].

To configure drive maps for the selected Clarity Server, follow the steps below:

- Select the Drive Maps dialog sub-tab on the Clarity Servers dialog tab [655]. The Drive Maps dialog sub-tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   656

Copyright © 2000-2006 Pixel Power Ltd.
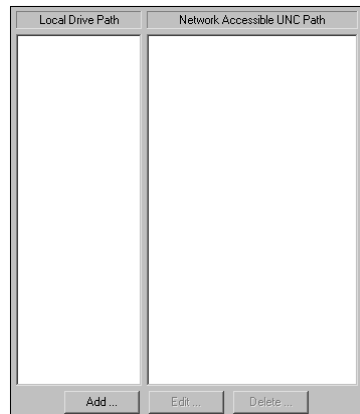
9.55.1.4.1   Add button

Select Add to add a new drive map on the selected Clarity Server. The Drive Map dialog box [622] is displayed where you can match a local drive path to a network accessible UNC (Universal Naming Convention).

9.55.1.4.2   Delete button

Select Delete to delete the selected drive mapping from the Local Drive Path [657]/Network Accessible UNC Path list box [657] on the selected Clarity Server. A warning message is displayed asking if you are sure you want to remove the selected drive mapping. Select OK to proceed or Cancel to abort the deletion.

9.55.1.4.3   Edit button

Select Edit to edit a selected drive map from the Local Drive Path [657]/Network Accessible UNC Path list box [657] on the selected Clarity Server. The Drive Map dialog box [622] is displayed where you can edit the local drive path or network accessible UNC (Universal Naming Convention) path.

9.55.1.4.4   Local Drive Path list box

Lists the local drive path of a mapping.

9.55.1.4.5   Network Accessible UNC Path list box

Lists the network accessible UNC (Universal Naming Convention) path of a mapping.

9.55.1.5   Edit button

Select Edit to edit the DNS network name (host name) and alias for the Clarity Server selected in the <server> list box [655]. The Clarity Job Server Path dialog box [597] is displayed where you can edit these settings.

9.55.1.6   Job Copy Settings dialog sub-tab

To configure job copy settings for the selected Clarity Server, follow the steps below:

- Select the Job Copy Settings dialog sub-tab on the Clarity Servers dialog tab [655]. The Job Copy Settings dialog sub-tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
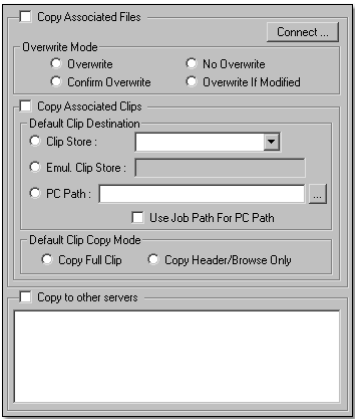
9.55.1.6.1 Copy Associated Files group box

Ensure that the Copy Associated Files box is checked to copy any files associated with the source job to the selected Clarity Server. The controls in the Copy Associated Files group box enable configuration of how associated files are copied. You can select to copy associated clips and configure how file paths are treated. You can also configure how the software reacts to situations where associated files of the same name appear on the selected Clarity Server.

Disconnect/Connect button

Select the Disconnect/Connect button to disconnect or connect from/to the Clarity Server selected in the <server> list box 655. Depending on whether the selected Clarity Server is connected or disconnected will:

a)   dictate the options that you can configure within the Copy Associated Files group box on the Job Copy Settings dialog sub-tab 657 (for example, configuration of the settings in the Overwrite group box do not require a connection with the server);

b)   dictate the information shown in the Available Still Directories group box 660 and Clip Availability group box 660 on the Server Properties dialog sub-tab 659.

The configuration of drive mappings using the Drive Maps dialog sub-tab 656 is not dictated by connection status.

Overwrite mode group box

If during the copying process, associated files of the same name are encountered on the selected Clarity Server, the software will do one of four things depending on the selections made in the Overwrite group box.

Option	Description
Confirm Overwrite	Select the Confirm Overwrite option to display a message every time an associated file that has the same name is encountered, prompting whether to overwrite the selected file or continue, leaving the existing file intact.
No Overwrite	Select the No Overwrite option to leave associated files with the same name intact.
Overwrite If Modified	Select the Overwrite If Modified option to overwrite associated files only if the existing file is older than the new file.
Overwrite	Select the Overwrite option to overwrite any existing files without prompting.

Copy Associated Clips group box

Ensure that the Copy Associated Clips box is checked to copy any clips associated with the source job to the selected Clarity Server. The controls in the Copy Associated Clips group box are enabled. All information about the availability of clip stores, emulated clips stores and level of clip acceptance is queried each Clarity Server using COM/DCOM. Therefore, pulling of clips from a clip store or pushing of clips to a clip store or emulated clip store is only possible when a COM/DCOM connection is possible. The DCOM settings on the host Clarity Server and any remote Clarity Servers must be configured correctly. See Enabling DCOM for the CG Tools software application on HOST systems 1068 for more information.

The Default Clip Destination group box enables you to explicitly select how clips are copied to the selected Clarity Server. You can select to copy to a physical Clarity clip store, to an emulated clip store or to a custom PC path. Select and configure one of the following options:

a) Select the Clarity Clip Store option to copy clips to a physical Clarity clip store on the selected Clarity Server. This option will only be available if the destination machine has a clip store. If the destination machine features multiple physical clip stores (volumes), select the desired volume using the adjacent drop-down list box.

b) Select the Emul. Clip Store option to copy clips to the emulated clip store on the selected Clarity Server. Again, this option will only be available if the Clarity Server indicates that it supports an emulated clip store. The path to the clip store is automatically filled after querying the server during connection and is not editable by the user. An emulated clip store on the selected Clarity Server can be configured using the Clip Store Emulation dialog tab 710 on the Local Preferences dialog box 696.

c) Select the PC Path option to copy clips to a custom PC path on the selected Clarity Server. This is the same as the old method of copying clips to a machine without clips, and the path selected is stored in the destination job file to enable the clips to be found. With this option selected, by default, clips will be copied to a folder called `Clips` inside the destination job path.

If it is desirable for clips to be written to a location on the destination machine other than the default `Clips` folder, then clear the Use Job Path For PC Path box. The text box adjacent to the PC Path is enabled. Enter the file path in the adjacent text box of the drive and folder on the destination system that you want to write clips to or select the Browse button. After selecting Browse, the Browse for Folder dialog box is displayed.
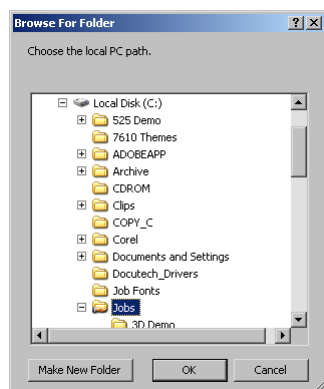
Browse to the drive and folder that you want to write clips to, then select OK to revert back to the Job Copy Settings dialog sub-tab 657.

Default Clip Copy Mode group box

If the destination is a physical clip store, then the software will only let you select the entire clip. If the destination is not a physical clip store and the destination machine has indicated that it only accepts header and browse frames, then that is all you will be allowed to select. Select the Copy Full Clip option to copy the entire clip or select the Copy Header/Browse Only option to copy just the header and browse frame.

9.55.1.6.2 Copy to other servers group box

If during a Clarity job copy to a selected Clarity Server, its is desirable for that same job and its related content be copied at the same time to one or more Clarity Servers that are known to the host (localhost) at the same time, select the Copy to other servers check box and then select the desired servers using the list box below (use the SHIFT or CTRL key together with the mouse to select multiple servers).

NOTE

The current host Clarity Server is never shown in the list of available additional severs.

9.55.1.7 Server Properties dialog sub-tab

To view and configure properties for the selected Clarity Server, follow the steps below:

• Select the Server Properties dialog sub-tab on the Clarity Servers dialog tab 655. The Server Properties dialog sub-tab appears.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
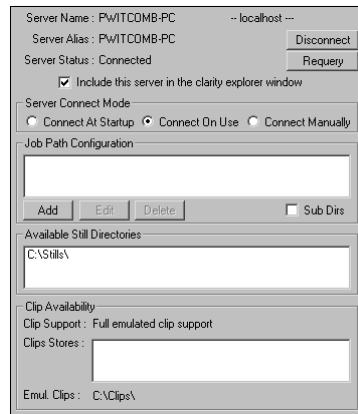
9.55.1.7.1 Available Still Directories group box

Information only appears when a Clarity Server is connected 661 **. Changes to the available still directories made on a selected Clarity Server are only reflected on the local host Clarity Server when the CG Tools software is re-started.**

The list box within the Available Still Directories group box displays the still directories available that are configured on the selected Clarity Server using the Still Store dialog tab 729 on the User Preferences dialog box 809 . **A drive mapping must be configured using the Drive Maps dialog sub-tab** 656 **for any paths shown in the list box.**

9.55.1.7.2 Clip Availability group box

Information only appears when a Clarity Server is connected 661 **. Changes to clip availability settings made on a selected Clarity Server are only reflected on the local host Clarity Server when the CG Tools software is re-started.**

The controls in the Clip Availability group box display available clip support for the selected Clarity Server.

Clip Support label

The status messages shown by the Clip Support label take into account three criteria:

ID	Criteria	Configured where	Setting and ID	
1	Presence of a physical clip store on the Clarity Server.	N/A	Yes	A
			No	B
2	Whether an emulated clip store is configured on the Clarty Server.	Clip Store Emulation dialog tab 710 Use Local Clip Store Emulation box 711	Yes	A
			No	B
3	Clip copy permissions configured on the Clarity Server.	Clip Store Emulation dialog tab 710 Default Clip Copy Mode group box 712	Do not accept clips 712	A
			Accept only header 712 and browse frame 712	B
			Accept any 712	C

The following status messages can be displayed, along with the reasons why using a combination of the criteria ID's from the above table:

Status Message	Reason
`Clip read and browse file write only`	(1A + 3B) or (1A + 2A + 3B)
`Full clip support`	(1A + 3C)
`Full clip/emulated clip support`	(1A + 2A + 3C)

Status Message	Reason
Full emulated clip support	(2A + 3C)
Emulated clip read and browse file write only	(2A + 3B)
No clip support	3A
Clip file read and browse file write only	3B
Clip file support	3C
Clip read only	(1A + 3A)
Emulated clip read only	(2A + 3A)

Clip Stores list box

Displays the available physical clips stores on the selected Clarity Server. The name shown is the name of the clip store on the host Clarity Server.

Emul. Clip label

Displays the path of the emulated clip store on the selected Clarity Server (if configured using the Clip Store Emulation dialog tab 710). **A drive mapping must be configured for this path using the Drive Maps dialog sub-tab** 656.

9.55.1.7.3 Connect/Disconnect button

Select the Disconnect/Connect button to disconnect or connect from/to the Clarity Server selected in the <server> list box 655. Depending on whether the selected Clarity Server is connected or disconnected will:

a) dictate the options that you can configure within the Copy Associated Files group box on the Job Copy Settings dialog sub-tab 657;

b) dictate the information shown in the Available Still Directories group box 660 and Clip Availability group box 660 on the Server Properties dialog sub-tab 659.

NOTES

- The configuration of drive mappings using the Drive Maps dialog sub-tab 656 is not dictated by connection status.
- Irrelevant of when and how a connection is initiated, a copy of the CG Tools software is started on the selected Clarity Server if the software if is NOT already running.

9.55.1.7.4 Include this server in the clarity explorer window check box

If the selected Clarity Server is required to be shown when browsing using the Clarity Explorer 362 or when copying jobs using the Basic 612 and Package 614 dialog tabs on the Copy Clarity Job dialog box 605, ensure that the Include this server in the clarity explorer window box is checked. The following important information should be noted when using this setting:

a) this setting will enable jobs to be copied using the Clarity Explorer Copy and Paste shortcut menu commands 367 and the Copy and Paste tools on the Toolbar 365;

b) if the Connect On Use option is selected in the Server Connect Mode group box 663, a connection will be made when the server is browsed using the Clarity Explorer;

c) if the Connect Manually option is selected in the Server Connect Mode group box 663, a connection will NOT be made when the server is browsed using the Clarity Explorer, thus meaning that server content cannot be viewed.

9.55.1.7.5 Job Path Configuration group box

Configuration of drive maps should be completed using the Drive Maps dialog sub-tab 656 **before attempting job path configuration for the selected Clarity Server using the Job Path Configuration group box** 661 **on the Server Properties dialog sub-tab** 659.

The controls in the Job Path Configuration group box enable the addition, deletion and editing of job paths for Clarity Servers. Job paths define where job content is stored on a Clarity Server. Each job path that is defined requires an associated drive map which enables the job path to be located from any Clarity Server. Different parts of the CG Tools software such as the Clarity Explorer 362 and the Copy Clarity Job dialog box 605 use job paths and their associated drive mappings to locate job content from any location correctly, without having to supply path information at the time of use.

This system of job path and drive mapping also enable paths to be copied to other Clarity Servers that are known to the host. With job path configurations defined for all servers, the local configuration XML file can then be copied to other systems within the same domain, making system administration much easier.

Job Path Configuration list box

Lists the job paths configured for the selected Clarity Server. Job paths that cannot be resolved because a usable drive map does not exist are indicated by the full UNC path being shown in brackets next to the alias name (e.g. `\\Clarity-095\C\Jobs`). If a job path can be interpreted correctly using a valid drive map, then the path shown will be a local path e.g. `c:\jobs` (as if the location was being browsed locally on that Clarity Server).

Add button

Select the Add button to add a new job path to the selected Clarity Server. The [Clarity Server Job Path dialog box](#) 597 is displayed. After selecting OK, if you have not already added a drive mapping for the new job path, a warning message is displayed.
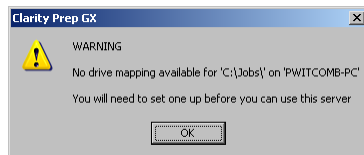
We recommend that you configure a drive mapping for the selected job path before adding further job paths to the list for the selected Clarity Server.

Edit button

Select the Edit button to edit the selected job path in the Job Path Configuration list box. The [Clarity Server Job Path dialog box](#) 597 is displayed.

Delete button

Select the Delete button to delete the selected job path in the Job Path Configuration list box. A warning message is displayed asking if you are sure you want to remove the selected job path. Select OK to proceed or Cancel to abort the deletion.

Sub Dir. check box

To ensure that sub-directories for all job paths in the Job Path Configuration list box are queried for job content, check the Sub-Dir. box. This setting should be used in situations where all job content and stills are located under a single job path.

Copy button

Select the Copy button to copy ALL job paths configured on another Clarity Server listed in the [<server> list box](#) 655 to the selected Clarity Server. The [Pick Server dialog box](#) 772 is displayed where an individual server can be selected from those available.

Set All button

Select the Set All button to copy ALL job paths configured on the selected Clarity Server to all servers listed in the [<server> list box](#) 655. A warning message is displayed asking if you are sure you want to copy all job paths to all servers. Select OK to proceed or Cancel to abort the copy.

9.55.1.7.6   Requery button

Select the Requery button to re-query the settings for the Clarity Server selected in the [<server> list box](#) 655.

9.55.1.7.7   Server Alias

Aliased name of selected Clarity Server (configured using the [Add](#) 656 or [Edit](#) 657 button).

9.55.1.7.8   Server Connect Mode group box

The controls in the Server Connect Mode group box enable the configuration of how and when the host Clarity Server (localhost) will attempt to connect to the selected Clarity Server.

Irrelevant of when and how a connected is initiated, a copy of the CG Tools software is started on the selected Clarity Server if the software is NOT already running.

Connect At Startup radio button

Select the Connect At Startup option to initiate a connection with the selected Clarity Server when the CG Tools software is started on the host server. This advantage of this option is that further connections are not required once a CG Tools session is started on the host server. The disadvantage is that you may not always require the CG Tool software to be started on the selected Clarity Server every time the host software is run, especially if the selected Clarity Server is under automation control.

Connect On Use radio button

Select the Connect On Use option to initiate a connection with the selected Clarity Server ONLY in situations where a connection is required. A connection is required if the host server needs to query the selected server i.e. when copying jobs or when browsing the Clarity Server using the Clarity Explorer 362.

Connect Manually radio button

Select the Connect Manually option to initiate a connection with the selected Clarity Server ONLY when the Connect button 661 is selected. If the Connect Manually option is selected in the Server Connect Mode group box 663, a connection will NOT be made when the server is browsed using the Clarity Explorer, thus meaning that server content cannot be viewed.

SEE ALSO

Connect/Disconnect button 661
Server Status 663

9.55.1.7.9   Server Name

DNS name of selected Clarity Server (configured using the Add 656 or Edit 657 button).

9.55.1.7.10   Server Status

The Server Status label indicates the status of the selected Clarity Server. Use in conjunction with the indicator shown next to the selected server in the <server> list box 655.

Label	Description
Disconnected	Not connected to the selected Clarity Server.
Connected	Currently connected to the selected Clarity Server.
Connecting	Currently attempting to connect to the selected Clarity Server.
Connection Failed	Failed to connect to the selected Clarity Server. This may be due to the Clarity Server not being turned on. It may also be caused if the network name of the server is not being recognised by the DNS, DCOM settings being incorrectly configured or transient networking problems.

NOTE

Irrelevant of when and how a connected is initiated, a copy of the CG Tools software is started on the selected Clarity Server if the software is NOT already running.

SEE ALSO

Connect/Disconnect button 661
Server Connect Mode group box 663

663   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.55.2　FTP dialog tab

The FTP dialog tab on the Global Preferences dialog box⌐654⌐ enables the addition, configuration and deletion of remote FTP servers that will appear in the Clarity Explorer⌐362⌐ and that will be connected to using the File Transfer Protocol (FTP). Once added and connected, FTP servers are shown as pink entries in the Clarity Explorer left-hand pane⌐372⌐ after re-starting the software. Each remote server added must have a valid FTP server operating on it. As an example, FTP servers can be other Clarity system units, Collage 2/Graphite 2 system units or PC media servers. The FTP dialog tab also enables the current Clarity system to act as an FTP server.

To add, configure and delete FTP servers, follow the step below:

- Select the FTP dialog tab on the Global Preferences dialog box⌐654⌐. The FTP dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
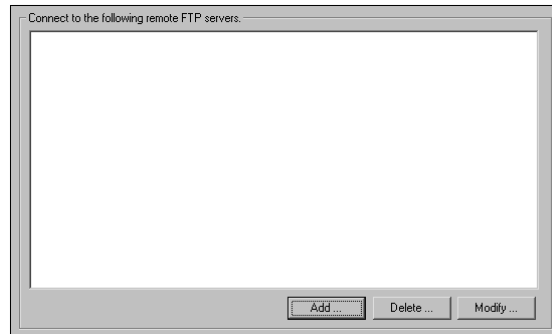
9.55.2.1　Connect to the following remote FTP servers group box

Enables the creation⌐664⌐, modification⌐664⌐ and deletion⌐664⌐ of FTP servers. FTP servers known to the system are shown in the list box.

9.55.2.1.1　Add button

Select Add to add a new FTP server.

The FTP Connection Details dialog box⌐646⌐ is displayed.

9.55.2.1.2　Delete button

To delete an existing FTP server, select an existing remote FTP server from the list and select Delete.

9.55.2.1.3　Modify button

To modify an existing FTP server, select an existing remote FTP server from the list and select Modify.

The FTP Connection Details dialog box⌐646⌐ is displayed.

9.55.3 Users dialog tab

The Users dialog tab enables the maintenance of user settings for Clarity Servers within your workgroup. Both cached local and remote user settings are stored in the following location by default for a new CG Tools software installation:

`C:\Program Files\Pixel Power Ltd\CG Tools Config`

If you are the system administrator [134] and have access to this dialog tab, then you can specify an alternative remote user management location (central repository) [137] where settings for users within your workgroup can be stored. When a server accesses the remote user location to read a users' settings, it makes a copy of the user settings and writes them to the `C:\Program Files\Pixel Power Ltd\CG Tools Config` folder. If the controls on this group box are unavailable (greyed out), then the specified remote user location cannot be found. The following message will appear also at the bottom of the dialog tab:

```
You are currently editing a local copy of the users file.
To administer the central users list, please re-start Clarity to re-load the users list.
```

This means that the cached version of the remote user settings have been loaded for the current session from the following folder:

`C:\Program Files\Pixel Power Ltd\CG Tools Config`

These cached settings cannot be edited. You must either specify a new, valid location where the remote user settings can be located or re-start the CG Tools software if the remote user settings could be not be located due to networking problems.

To configure user settings, follow the step below:

- Select the Users dialog tab on the Global Preferences dialog box [654]. The Users dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
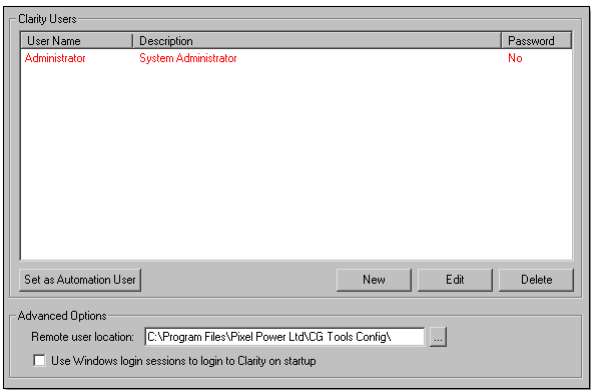
SEE ALSO

Intermediate level CG Tools user management, Clarity Server and job copy configuration (7.1.0.0) [128]
User management system feature reference [133]
Example user management and Clarity Server workgroup configuration [139]
Featured XML files, basic description and tag reference (where relevant) [166]

9.55.3.1 Clarity Users group box

The controls in this group enable the selection [666], addition, editing and deletion [666] of users defined for the current workgroup. Is also enables a selected user to be configured as the automation user [666].

SEE ALSO

Configure new user accounts [143]

9.55.3.1.1   \<users> list box

The \<users> list box lists the users defined for the current workgroup and enables selection of a user for subsequent configuration using the Edit button 666 and deletion using the Delete button 666.

Column	Description
User Name	Displays the login name of defined users for the current workgroup. For each user, this is defined using the Login Name text box 561 in the General group box 561 on the Add/Edit User dialog box 560.
Description	User's descriptions defined using the Description text box 562 in the General group box 561 on the Add/Edit User dialog box 560.
Password	Displays whether defined users in the current workgroup are utilising a defined password. For each user, this is defined using the Requires Password check box 562 in the General group box 561 on the Add/Edit User dialog box 560.

9.55.3.1.2   New, Edit and Delete buttons

To create a new user profile or edit an existing user profile selected in the \<users> list box 666, select New or Edit. The Add/Edit User dialog box 560 is displayed. To delete an existing user profile, select Delete.

9.55.3.1.3   Set as Automation User button

It is possible for users to control the CG Tools software using external applications. When an external application tries to connect to the CG Tools software, it checks to see if there is a user logged in. It also checks the access rights of the current user to make sure that they have write access to jobs. If neither of these are applicable, the CG Tools software will log the current user out, and log in as the Automation user. When creating the user accounts, only one user account can be specified to be automatically logged in when required to by a controlling application.

To define an existing user profile selected in the \<users> list box 666 as the automation user, select the Set As Automation User button.

SEE ALSO

Defining the Automation user 135
Users.xml 172
Users.xml tag reference 172

9.55.3.2   Advanced Options group box

The controls in this group box enable configuration of advanced user settings including selection of whether Microsoft Windows logins are used by users to login to Clarity systems 667 and the definition of where the remote user location file is located 666 within the workgroup.

9.55.3.2.1   Remote user location text box and browse button

On each Clarity Server there is a Local user management location that is defined when the CG Tools software is first started where the user management XML and text files are created. The default location is:

```
C:\Program Files\Pixel Power Ltd\CG Tools Config
```

This location cannot be changed. This location is then used as the path for the Remote user management location. Remote files are copies of those same XML and text files that are stored in the Local user management location, but they are stored in a directory location specified by the user (usually the system administrator) in a network location that can be accessed by all systems within a proposed network workgroup.

This location can be changed using the Remote user location text box. Alternatively, use the adjacent Browse button to browse the network for the desired system and shared folder on that system.

After specifying a new Remote user management location over the default location, when the CG Tools software is closed, the files are copied from the Local user management location to the new Remote user management location. Subsequently starting the CG Tools software will result in all the relevant files being copied from the Remote user management location to the Local user management location, so that as a user moves between Clarity Servers, the settings will remain the same.

NOTE

You must create and share a folder on a networked system that will act as the Remote user management location where user management XML and text files [135] can be read and written.

SEE ALSO

Remote and Local user management locations [137]
Create and share Remote user management location folder on networked machine (Pixel-p4-02) (1) [142]
Configure Remote user management location for ClarityPREP1 (D) [145]

9.55.3.2.2 Use Windows login sessions to login to Clarity on startup check box

The user management system can be configured to log users into the CG Tools software via their Microsoft® Windows® account login. If the Use Windows login sessions to login to Clarity on startup box is checked, when the CG Tools software is started on a Clarity Server, the user management system checks the current user name that is logged into the current Microsoft® Windows® session. If this name matches a user name defined in the `Users.xml` [172] file, then CG Tools will login transparently using that user account.

NOTE

Transparent login using Microsoft® Windows® logins [138] only occurs if the Requires password box [562] on the Add/Edit User dialog box [560] is cleared for that user account.

SEE ALSO

Defining that Microsoft® Windows® login sessions are used to login to CG Tools on startup (OPTIONAL) (E) [146]
Using Microsoft® Windows® logins [138]
Users.xml [172]
Users.xml tag reference [172]

9.55.4 Video dialog tab

To configure video options, follow the step below:

- Select the Video dialog tab on the Global Preferences dialog box [654]. The Video dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
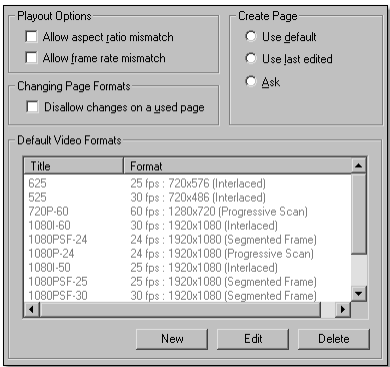
9.55.4.1 Changing Page Formats group box

In the Changing Page Formats group box, check the Disallow changes on a used page box to disable the ability to change the video standard and aspect ratio of pages containing content. If the box is left cleared, the video standard of and aspect ratio pages can be changed. Additionally, providing the aspect ratio of the new standard matches that associated with the previous video standard, page elements will be converted and saved.

NOTE

If you have configured either of the mismatch controls in the Playout group box, resulting playout on the selected

667   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

channel may appear incorrectly. Anomalies may include page backgrounds being rescaled to match the new aspect ratio and page elements in the foreground being moved out of position. Cel animations may also playback differently due to a change in frame rate associated with a new video standard.

9.55.4.2   Create Page group box

Use the controls in the Create Page group box to configure what page format settings are used when a new page is created.

9.55.4.2.1   Ask radio button

Select the Ask option to specify that the software requests specific settings before page creation.

9.55.4.2.2   Default radio button

Select the Default option to specify whether a new page, when created, uses the default setting as specified in the Default group box.

9.55.4.2.3   Use last edited radio button

Select the Use last edited option to specify whether a new page uses the settings assigned to the last page that was edited in the Graphic Edit window 260.

9.55.4.3   Default group box

Use the controls in the Default group box to configure the default/current job page format configuration 668.

9.55.4.3.1   New, Edit and Delete buttons

To create or edit a custom video format, select New or Edit. The Edit Video Format dialog box 629 is displayed. To delete a custom video format, select Delete.

9.55.4.4   Playout group box

Use the controls in the Playout group box to configure the mismatching of aspect ratios 668 and frame rates 668 during playout.

9.55.4.4.1   Allow aspect ratio mismatch check box

Check the Allow aspect ratio mismatch box to enable playout of pages on occasions when the aspect ratio does not match the output channels' ratio.

9.55.4.4.2   Allow frame rate mismatch check box

Check the Allow frame rate mismatch box to enable the playout of pages on occasions when the frame rate does not match the output channels' frame rate.

9.56   Goto Page dialog box

Enables the selection of page to open within the Graphic Edit window.

- To display the Goto Page dialog box, select Page> 390 Goto 391. The Goto Page dialog box is displayed.
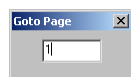
Enter the number of the page that you want to go to. If the page does not exist, pages up to and including that page will be created. Pages up to the specified page are not listed in the Page Browser 251 or Page List 252 until they are

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   668

Copyright © 2000-2006 Pixel Power Ltd.

edited. The page in question is opened in the Graphic Edit window [260] if is not already shown.

9.57   Global Field Selection dialog box

The selection of a global field from the Field Data Connection Settings control tab [281] is achieved using the Global Field Selection dialog box.

- To display the Global Field Selection dialog box where a global field can be selected, select Find on the Field Data Connection Settings control tab [281] on the Graphics Tools [266]. The Global Field Selection dialog box is displayed.
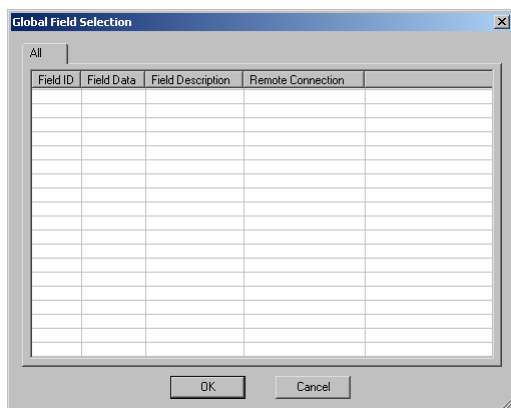
9.58   Grab Video dialog box [CLARITY]

Applicable to Clarity systems only.

The grabbing of video frames from a live source is achieved using the Grab Video dialog box. To display the Grab Video dialog box where live video frames can be grabbed; firstly you must ensure that you have a page open within the Graphic Edit window [260] and that you are currently editing/viewing the background layer.

- Select Background> [419] Grab Video Frame [420]. The Grab Video dialog box is displayed. If the Grab Video Frame command is greyed out, see above.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
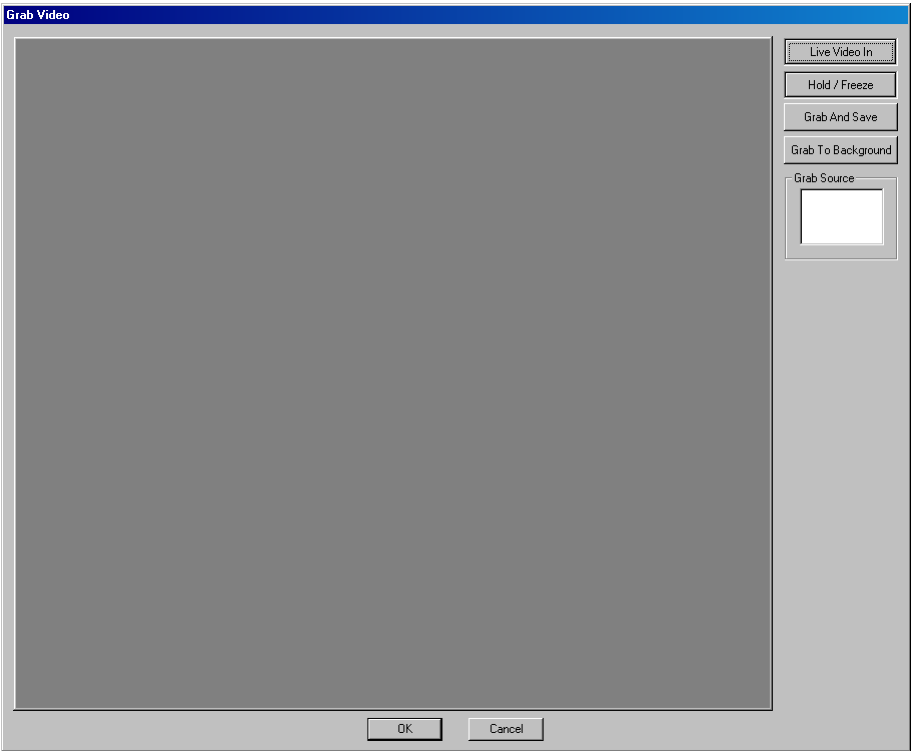
9.58.1 Copy to Background button

With a live video source frozen/paused in the Video preview window [671], select the Copy to Background button to copy the frame of video to the background of the page currently open in the Graphic Edit window. The Grab Video dialog is closed and the frame appears as the background of the current page open in the Graphic Edit window.

9.58.2 Grab And Save button

With a live video source being previewed or frozen in the Video preview window [671], select Grab And Save button to grab a frame of video and save it to a location for subsequent recall as a page background or still etc. The Save As Background dialog box is displayed.

9.58.3 Grab Source list box

Select the desired grab source using the options in this list box.

Option	Source
Live A	Live input from channel A
Live B	Live input from channel B

9.58.4 Grab to Background button

With a live video source being previewed in the Video preview window [671], select Grab to Background to grab a frame of video to the background of the page currently open in the Graphic Edit window [260]. The Grab Video dialog is closed and the frame appears as the background of the current page open in the Graphic Edit window.

9.58.5   Hold / Freeze button

Click on the Hold / Freeze button to pause or freeze the live video being previewed in the Video preview window $\boxed{671}$. You can then decide whether you want to Grab And Save $\boxed{670}$ or Grab to Background $\boxed{670}$.

9.58.6   Live Video In button

Click on the Live Video In button to begin previewing live video from the source selected using the Grab Source list box $\boxed{670}$.

NOTE

If no video is displayed, check the settings in the System Settings group box $\boxed{794}$ on SD Hardware Configuration dialog box $\boxed{786}$. If all is well, this is indicated by the green Digital A/B Input Status box $\boxed{794}$.

9.58.7   Save to File button

With a live video source frozen/paused in the Video preview window $\boxed{671}$, select Save to File button to save the frame to a location for subsequent recall as a page background or still etc. The Save As Background dialog box $\boxed{781}$ is displayed.

9.58.8   Video preview window

Previews the moving live video from the connected source and also displays the captured frame once the Grab And Save or Grab to Background button has been selected.

9.59   Insert/Edit Stack Control dialog box

A page stack must be currently open in order to display this dialog box.

The insertion and editing of page stack control entries is achieved using the Insert/Edit Stack Control dialog box.

- To display the Insert/Edit Stack Control dialog box where a page stack control entry can be inserted or edited, select a blank or populated entry in the Control column of the Page Stack control box $\boxed{325}$ and then select Edit(Stack)> $\boxed{388}$ Insert Entry $\boxed{388}$ or select Edit(Stack)> $\boxed{388}$ Edit Entry $\boxed{388}$. The Insert/Edit Stack Control dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
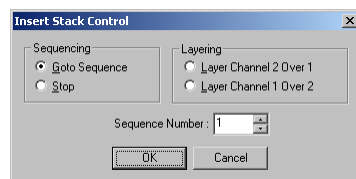
The controls on this dialog box change depending on what is selected in the Sequencing group box $\boxed{671}$.

9.59.1   Sequencing group box

The controls in the Sequencing group box enable page sequences to be referenced in the stack for playout. You can select a page sequence to goto $\boxed{672}$ or select to insert a stop $\boxed{672}$ entry in the Control column. See Page stack sequences $\boxed{326}$ for more information.

9.59.1.1 Goto Sequence radio button

Select the Goto Sequence option to reference a page sequence. Select the desired sequence using the Sequence Number increment box 672.

9.59.1.2 Stop radio button

Select the Stop option to insert a Stop in the Control column.

9.59.2 Layering group box

The controls in the layering group box enable you to layer the output of channels 1 and 2. You can layer channel 1 over channel 2 672 and vice-versa 672.

9.59.2.1 Layer Channel 1 Over 2 radio button

Select the Layer Channel 2 Over 1 option to layer the output of channel 2 over the output of channel. This is used when you want to create complex multi-layer graphics that could not be created on a single page.

9.59.2.2 Layer Channel 2 Over 1 radio button

Select the Layer Channel 2 Over 1 option to layer the output of channel 2 over the output of channel. This is used when you want to create complex multi-layer graphics that could not be created on a single page.

9.59.3 Sequence Number increment box

Select the page sequence to be referenced by the current entry using the Still number increment box.

9.60 Insert/Edit Stack Entry dialog box

A page stack must be currently open in order to display this dialog box.

The insertion and editing of page stack entries is achieved using the Insert/Edit Stack Entry dialog box.

- To display the Insert/Edit Stack Entry dialog box where a page stack entry can be inserted or edited, select a blank or populated entry in any column EXCEPT the Control column of the Page Stack control box 325 and then select Edit(Stack)> 388 Insert Entry 388 or select Edit(Stack)> 388 Edit Entry 388. The Insert/Edit Stack Entry dialog box is displayed.
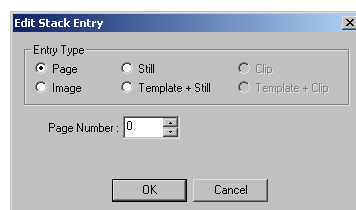
The controls on this dialog box change depending on what is selected in the Entry type group box 672.

9.60.1 Entry type group box

Enable the selection of what type of stack entry you want to insert of change to.

Entry type	Description
Page	Insert or change selected entry to a page.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   672

Copyright © 2000-2006 Pixel Power Ltd.

Entry type	Description
Image	Insert or change selected entry to an image.
Still	Insert or change selected entry to a still image.
Template + Still	Insert or change selected entry to a page. When the page is required, the defined still is loaded into the page.

9.60.2 Image Path text box and browse button

Enter the file path in the Image Path text box of the image file that you want to use or select the browse button and browse for the desired image file. If the browse button is selected, the Select Image dialog box 798 appears where you can browse and select the desired image file.

9.60.3 Page number increment box

Select the desired page in the current job using the Page number increment box.

9.60.4 Still Dir drop-down list box and browse button

The default stills directory is shown. This is defined using the Still Store dialog tab 730 on the Local Preferences dialog box 696 (Options> 429 Local Preferences 430).

Enter the file path in the Still Dir drop-down list box of the new stills directory that you want to scan or select the browse button and browse for the new stills directory. You can also select an alternative recently used still directory using the drop-down list.

If the browse button is selected, the Browse for Folder dialog box appears where you can browse and select the desired directory.
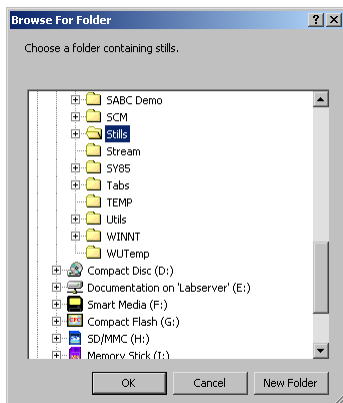
9.60.5 Still number increment box

Select the desired still number that is to be located in the defined still store location (Still Dir text box 673) using the Still number increment box.

9.61 Insert Logo dialog box

The insertion and updating of logos is achieved using the Insert Logo dialog box.

- To display the Insert Logo dialog box where a logo image can be selected, either

  - select Text> 408 Insert Logo 416;
  - select the desired preview in the Preview list on the Logos control tab 289 and then select the Define Logo tool or shortcut menu command 323;

673   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

- click on the Select button on the Logo Properties control tab [288].

The Insert Logo dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
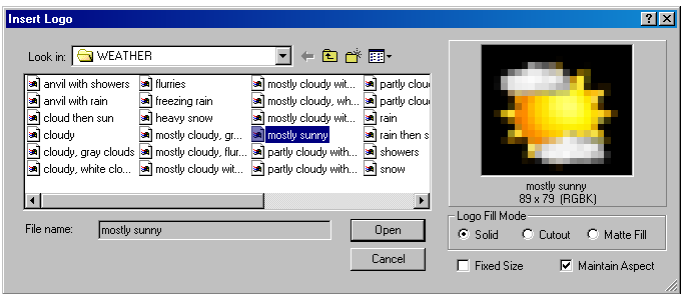
9.61.1 Fixed Size check box

By default, the picture will be resized to the current text height before is was inserted as a logo. To ensure that the logo is displayed at its full size, check the Fixed Size box.

NOTE

This setting can also be configured using the Logos and Logo Fonts shortcut menu [323].

9.61.2 Logo Fill Mode group box

Select either Solid, Cutout and Matte Fill from the Type group box.

Type	Description
Solid	Insert as a solid picture.
Cutout	Use the key saved with a picture as a cutout for the logo. If no matte was saved with the picture, then this option will have no effect.
Matte Fill	Use the key saved with a picture as a matte filled shape. This will use the logo picture key channel to define a shape which will be filled by the current foreground drawing colour and shading.

NOTE

These settings can also be configured using the Logos and Logo Fonts shortcut menu [323].

9.61.3 Maintain Aspect check box

Check the Maintain Aspect box to maintain the aspect ratio of the highlighted logo file.

NOTE

This setting can also be configured using the Logos and Logo Fonts shortcut menu [323].

9.61.4 Preview window

Displays a preview of the highlighted logo.

9.62 Importing Subtitles dialog box

The progress of a subtitle import initiated using the Subtitling dialog box [803] is shown using the Importing Subtitles dialog box.
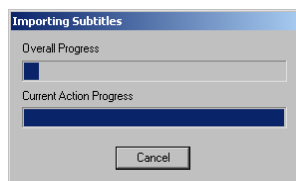
9.63 Insert Symbol dialog box

The insertion of text symbols is achieved using the Insert Symbol dialog box.

- To display the Insert Symbol dialog box where a symbol can be selected, select Text> [408] Insert Symbol [417]. The Insert Symbol dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
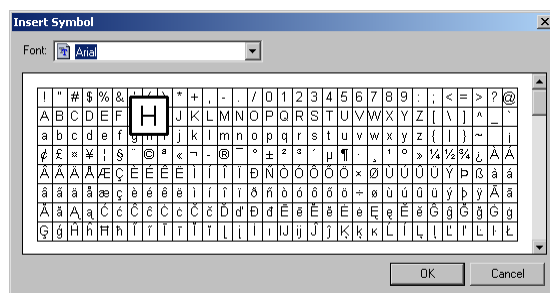
SEE ALSO

Inserting symbols and special characters [544]

9.63.1 Font drop-down list box

The font for the selected text or character at the current cursor position is indicated by the Font drop-down list box. If desired, select another font that contains the symbol that you want to insert. The available symbols for the selected font are shown in the Character Selection Map [675].

9.63.2 Character Selection Map

Displays the symbols available for insertion with the currently selected font. For more information on inserting symbols, see Inserting symbols and special characters [544].

9.64 Job Copy Status dialog box

The status of the current Clarity job copy is shown using the Job Copy Status dialog box.

- To display the Job Copy Status dialog box, select OK on the Copy Clarity Job dialog box [605].

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
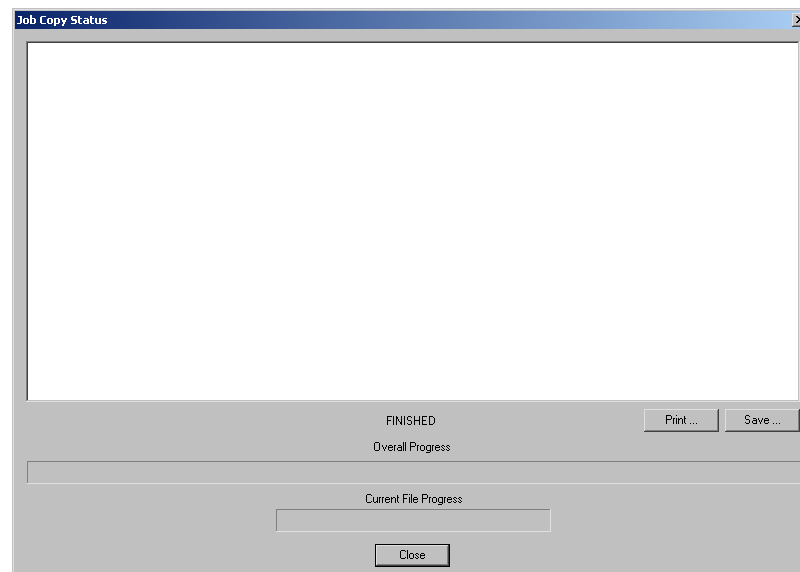
9.64.1   \<information window\>

Displays information relating to each individual file that is copied as part of the entire job copy process. For more information on the type of information displayed in this window and how to interpret it for troubleshooting purposes, see

9.64.2   Print button

Once the job copy has completed, select Print to print the contents of the job copy report. The standard Windows Print dialog box is displayed.
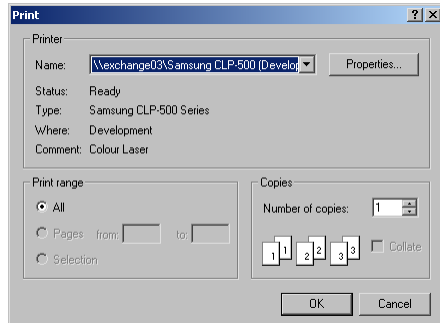
9.64.3   Save button

Select Save to save the job copy report to a .TXT file so that it me stored for reference. The Save As dialog box 781 is displayed when you can specify a location and filename for the .TXT file. This may be useful in situations when you have to send job copy information to Pixel Power support.

9.64.4   Overall Progress progress bar

Displays the overall progress of the job copy.

9.64.5   Current File Progress progress bar

Displays the copy progress of the current file.

9.65   Job List View - Display Options dialog box

The Job List View - Display Options dialog box enables the configuration of various display options relating both to page status and the automatic sequencing of pages. To display the Job List View - Display Options dialog box, follow the step below:

- Select Options> [429] Job List View>Display Options [431]. The Job List View - Display Options dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
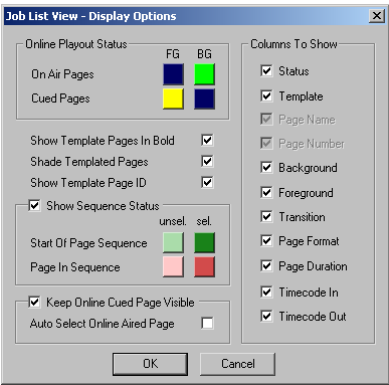
9.65.1   Columns To Show group box

Available columns shown within the Page List [252] in the Job Edit window [250] can be displayed or hidden as required. Hiding a number of columns (especially the Duration column) may have a positive impact of the time it takes to update the Page List when scrolling if the job contains a large number of pages. Check an adjacent box to ensure that the related column is displayed in the Page List or clear the box to ensure that the column is hidden.

Check box	Description
Status	Hide or display the Status column that shows information about pages that are currently either On Air or Cued.
Template	Hide or display the Template column that enables pages to be configured as a read-only template pages upon which other pages can be based.
Page Name	Unavailable for selection; must always be displayed.
Page Number	Unavailable for selection; must always be displayed.
Background	Hide or display the Background column that shows page backgrounds settings.
Foreground	Hide or display the Foreground column that shows page backgrounds settings.
Transition	Hide or display the Transition column that shows page transition settings.
Page Format	Hide or display the Page Format column that shows page format settings.
Page Duration	Hide or display the Duration format column that shows the duration of pages.
Timecode In	Hide or display the Timecode In column that shows the in timecode reference for pages
Timecode Out	Hide or display the Timecode Out column that shows the out timecode reference for pages.

SEE ALSO

Page List [252]
Interacting with the Page List using the mouse and keyboard [255]

677   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.65.2 Keep Online Cued Page Visible group box

9.65.2.1 Auto Select Online Aired Page check box

If you have selected to keep online cued pages visible 678, check the Auto Select Online Aired Page box to additionally automatically select the cued page in the Page List, making it easy to use the arrow keys to select a neighbouring page if required.

9.65.2.2 Keep Online Cued Page Visible check box

By default, when a page is cued and highlighted in the Page List 252/Page Browser 251, if the page in the list is at a point where it cannot be seen (i.e. the current page range shown in the list is 1-20 and the cued page is page 38), the list will NOT scroll to ensure that the cued page is in view. To enable cued pages to be always visible in the Page List/ Page Browser, ensure that the Keep Online Cued Page Visible box is checked.

9.65.3 Online Playout Status group box

The colour of foreground text and/or the background of the status information for pages shown in the Page List 252 when they on air 678 or cued 678 can be configured.

9.65.3.1 On Air Pages colour selection boxes

To configure the colour of foreground text and/or the background of the status information for pages shown in the Page List 252 when they online, click on the adjacent FG and BG colour selection boxes and select a colour from the Colour Selection dialog box 599 that appears.

9.65.3.2 Cued Pages colour selection boxes

To configure the colour of foreground text and/or the background of the status information for pages shown in the Page List 252 when they cued, click on the adjacent FG and BG colour selection boxes and select a colour from the Colour Selection dialog box 599 that appears.

9.65.4 Shade Templated Pages check box

Pages in the Page List 252 that use a template as their basis can be highlighted by intermediate grey hatching if desired. Check the Shade Templated Pages box to turn this function on.

SEE ALSO

A guide to how page status is displayed 257
Configuring how template pages are shown 259

9.65.5 Show Sequence Status group box

When automatic page sequencing is being used, enhanced visual representation of those pages that start a sequence and those that form part of subsequent sequences can be configured. By default, pages that start a page sequence are shown with a green background and those pages that are part of a sequence are shown with a pink background.

Refer to A guide to how page status is displayed 257 for default examples.

9.65.5.1   Page In Sequence colour selection boxes

To configure the colour of pages that continue a sequence (both when un-selected and selected), click on either of the Page In Sequence colour selection boxes and select a colour from the Colour Selection dialog box ⌐599⌐ that appears.

9.65.5.2   Show Sequence Status check box

Ensure that the Show Sequence Status box is checked. The controls in the group box become enabled.

9.65.5.3   Start Of Page Sequence colour selection boxes

To configure the colour of pages that start a sequence (both when un-selected and selected), click on either of the Start Of Page Sequence colour selection boxes and select a colour from the Colour Selection dialog box ⌐599⌐ that appears.

9.65.6   Show Template Page ID check box

Pages that use a template as their basis can also display a label within the Status column ⌐253⌐ in the Page List ⌐252⌐ identifying the template page being used. Check the Show Template Page ID box to turn this function on.

SEE ALSO

A guide to how page status is displayed ⌐257⌐
Configuring how template pages are shown ⌐259⌐

9.65.7   Show Template Pages In Bold check box

Pages that are templates for other pages can be highlighted in bold if desired. Check the Show Template Pages In Bold box to turn this function on.

SEE ALSO

A guide to how page status is displayed ⌐257⌐
Configuring how template pages are shown ⌐259⌐

9.66   Job Preferences dialog box

The configuration of job based preferences is achieved using the Job Preferences dialog box. To display the Job Preferences dialog box where page configuration can be achieved, follow the step below:

*   Select Options> ⌐429⌐Job Preferences ⌐430⌐. The Job Preferences dialog box is displayed.

The dialog box contains two dialog tabs. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of
General ⌐680⌐	General job preferences.
Scripting ⌐684⌐	Scripting preferences.

9.66.1 General dialog tab

To configure general job preferences, follow the step below.

- Select the General dialog tab on the Job Preferences dialog box 679. The General dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
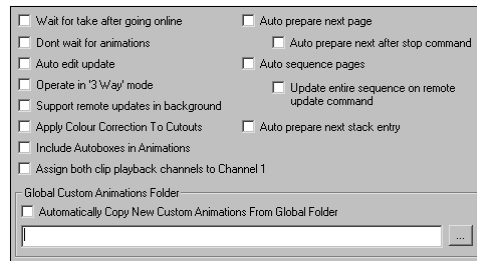
9.66.1.1 Apply Colour Correction To Cutouts check box

The software utilises the additive method of keying when displaying imported cutout images. If cutout images have been saved with a degree of transparency using for example Adobe Photoshop, when the cutout image is composited by the CG Tools software, the transparency may not appear correctly as the background colour saved with cutout image may have been rendered into the transparency plane. To enable the software to automatically correct colours in cutout images that have the transparency/key data factored into the image colour data, ensure that Apply Colour Correction To Cutouts box is checked.

9.66.1.2 Assign both clip playback channels to Channel 1 check box

On dual SD channel systems, by default, the system is configured to play one clip per channel. This is to conform with the predicted default use of having one clip per page (either as a background or as a pasted clip in the foreground).

In situations where:

- two clip are required per page (usually by having two pasted video clips in the foreground of a single page);
- you want page transition animations 440 (e.g. reveal), between two pages containing background video clips on channel 1, to render correctly during playout;

you can apply both clip playback channels to channel 1 on a per job basis. With this setting turned on, channel 2 cannot be used as a video clip playback channel whilst playing the current job.

To enable this functionality, ensure that the Assign both clip playback channels to Channel 1 box is checked.

NOTES

If you want this way of operation to become the default for all new jobs, check the matching Assign both clip playback channels to channel 1 check box 715 in the Default Clip Channel Assignment group box 715 on the General dialog tab 714 of the Local Preferences dialog box 696.

9.66.1.3 Auto edit update check box

By default, when editing pages using the Graphic Edit window 260, Clarity will display these edits in real-time on the Edit output. In some circumstances (when background painting) this real-time update can reduce system performance. To disable the automatic display of page edits on the Edit output, ensure that Auto Edit Update check box is cleared.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   680

Copyright © 2000-2006 Pixel Power Ltd.

9.66.1.4   Auto prepare next page check box

Not available for selection if the <u>Auto sequence pages check box</u> 681 is checked.

Whilst online, by default, Clarity will automatically prepare the next page. In circumstances where playout of pages is non-linear, there is no requirement for the next page in the <u>Page Browser</u> 251 to be prepared as it is unlikely to be the next page required for playout. To disable the automatic preparation of pages, ensure that the Auto Prepare Next Page check box is cleared.

NOTE

If the Auto prepare next page check box is checked, then the <u>Auto prepare next after stop command check box</u> 681 is enabled for selection.

9.66.1.4.1   Auto prepare next after stop command check box

When the <u>Auto prepare next page check box</u> 681 is checked, the Auto prepare next after stop command check box is available for selection.

Whilst online, by default, Clarity will NOT automatically prepare the next page when animation on the current page is stopped. In circumstances where there is a requirement for the next page in the <u>Page Browser</u> 251 or <u>Page Stack</u> 325 to be prepared, you can enable the automatic preparation of the next page.

To enable the automatic preparation of pages after a stop command is issued, ensure that the Auto prepare next page after stop command check box is checked.

9.66.1.5   Auto prepare next stack entry check box

Whilst online, by default, if the <u>Page Stack</u> 325 is being used, Clarity will automatically prepare the next stack entry in the page stack. In circumstances where playout of pages via the page stack is non-linear, there is no requirement for the next page in the stack to be prepared as it is unlikely to be the next page required for playout. To disable the automatic preparation of the next stack entry in the page stack, ensure that Auto Prepare Next Stack Entry check box is cleared.

9.66.1.6   Auto sequence pages check box

Not available for selection if the <u>Auto prepare next page check box</u> 681 is checked.

If you do actually want Clarity to be able to play out small sequences of pages from a single automation call whilst you have <u>Auto Prepare Next Page</u> 681 and <u>Auto Prepare Next Stack Entry</u> 681 turned off, you can tell the system to automatically prepare and take pages one after another, as long as they are numerically sequential and they have no wait applied to the page transition.

The automatic sequencing of pages was introduced to enable the creation of complex animation sequences that cannot be created using a single page. The functionality enables a sequence of pages to be created which, during playout, are treated as a single page. If the sequence start page is recalled, then the entire sequence is played out as a single entry in the queue i.e. if you take the first page in a sequence then request to prepare another page, then the subsequent prepare will not occur until the entire sequence has played out.

By definition, a page sequence is a group of numerically sequential pages, where the start of a sequence is indicated by a page with a wait, and subsequent pages in the sequence have a delay of some sort. A page sequence is broken either by encountering another page formatted with a wait, or a break in the numerical sequence of active page numbers.

To automatically sequence numerically sequential pages, ensure that Auto Sequence Pages box is checked.

NOTE

If the Auto sequence pages box is checked, then the <u>Update entire sequence on remote update command check box</u> 682 is enabled for selection.

681   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.66.1.6.1   Update entire sequence on remote update command check box

When the <u>Auto Sequence Pages box</u> 681 is checked, the Update entire sequence on remote update check box is available for selection.

Selecting the Update entire sequence on remote update check box enables remote control write page and update field commands that reference a sequence start page to automatically filter down through all pages in the sequence. This enables automation control to be much simpler as the automation system can treat page sequences both as single entities for creation and update as well as playout, requiring only one entry in automation play lists.

For example, a write page command will copy all the pages of the sequence to the requested destination, and an update field command will update the field on all of the pages. The following points should be noted when using this functionality:

a)   a field need not exist on all the pages in the sequence to be updated successfully. The system will check all of the pages for a field before returning its success or failure;

b)   automatic updates ONLY work when the FIRST sequence page is referenced; calling any of the functions with a page from within the sequence will NOT work;

c)   in background update mode, only one text file is created, and this is for the sequence start.

Therefore if you try to recall a page within the sequence without first recalling the sequence start page, then it could fail completely, or at the very least you are not guaranteed to have the latest data in the page.

9.66.1.7   Don't wait for animations check box

Should be used in situations where you require uninterrupted playout of jobs that contain waits on animations, page transitions, cel animations etc. This setting will override any wait for takes, converting them in essence to delay settings of zero. Only the inherent time it takes for animations to prepare will introduce delays into the playout of the job. To enable this functionality, ensure that the Don't wait for animations box is checked.

NOTES

Actual wait or delay setting for animated pages and page elements are not changed within the job but merely overridden globally.

9.66.1.8   Global Custom Animations Folder group box

The controls in the Global Custom Animations Folder group box counter two similar potential problems caused by upgrading to CG Tools software version 7.1.0.6 or later:

a)   where existing jobs reference custom animations that have been previously created by external scripts or software, then the external software or scripts will need to be modified to write the files into the new folder under the job file (as per the new way of working);

b)   because the CG Tools software defaults to looking for older custom animations in the `CG Tools 7.1\Custom Animations` folder, when jobs saved in a previous version that reference custom animations are loaded, they will NOT look for the referenced files in the correct location.

You can specify that the job should keep checking the old location. This can be achieved using the controls in the Global Custom Animations Folder.

To specify on a per-job basis the checking of a previous location that contains older custom animation files, check the <u>Automatically Copy New Custom Animations From Global Folder check box</u> 683. The text box and browse button are enabled below.

Using the text box, specify what the folder is. If you want to navigate to the folder using normal Windows methods, select the Browse button. The Browse for Folder dialog box is displayed. The folder specified by default is configured using the <u>Default Global Custom Animations Folder group box</u> 716 on the <u>General dialog tab</u> 714 on the <u>Local Preferences dialog box</u> 696.
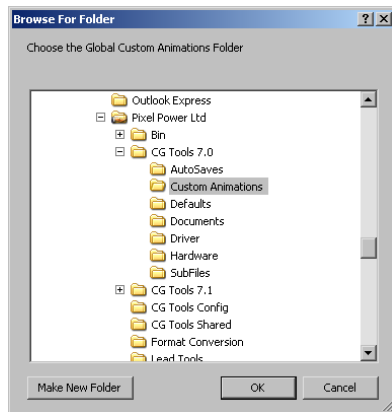
Select a new folder location and then select OK. When the current job is saved, this location setting is stored in the job file. With this option set:

- the software will copy all of the custom animations used by the job from the location defined using the Global Custom Animations Folder group box to a Custom Animation folder beneath the folder where the job file is located e.g. `C:\MyJobs\MyCustomJob\Custom Animations;`
- the software will subsequently check for updated custom animation files in the specified location before every attempt to playout a custom animation. If the file is newer, it will be re-copied to the local job folder e.g. `C:\MyJobs\MyCustomJob\Custom Animations.`

SEE ALSO

Changes to Custom Animation implementation for CG Tools version 7.1.0.6 465

9.66.1.8.1   Automatically Copy New Custom Animations From Global Folder check box

To specify that jobs should check the older location where custom animation files are stored, check the Automatically Copy New Custom Animations From Global Folder check box.

SEE ALSO

Global Custom Animations Folder group box 682

9.66.1.9   Include Autoboxes in Animations check box

By default, during the playout of animated text within text pages that is formatted with autoboxing, autoboxing of word/lines/characters is not animated with the text. To enable the animation of autoboxing around animated text within text pages, ensure that the Include Autoboxes in Animations box is checked. With this setting turned on, only animated text that is being rendered by word, line or page with include animated autoboxing. If the animation is configured to render by character, the autobox will remain inanimate and will be shown fully at the start of the animation.

9.66.1.10   Operate in '3 Way' mode check box

Should be used in scenarios where whilst online, you require cued pages to be prepared on all channels, prior to a channel being manually selected and the page being then taken by the operator. Useful when playing out stacks of images or stills. To enable this functionality, ensure that the Operate in '3 Way' mode1 box is checked.

9.66.1.11   Support remote updates in background check box

If Clarity is under the control of an automation system, template pages will be filled by the automation system as soon as requested unless the automation system parses a request to update the selected job in the background.

If this is the case, background page text files will be created for each template page in the selected job. These files are created in a subfolder with the same name as the job, in the same folder as the job. Each text file is named using the page number that its refers to in the job e.g. `9000.txt.`

```
Page Number
9000
Template Page Number
2
Field Data
0
Tom
0
0
Field Data
1
Dick
0
0
Field Data
2
Harry
0
0
```

The Support remote updates in background function enables the current job to check for these files and update page templates using the data stored within them. This can occur both when the jobs is loaded, ready for playout or when is not loaded and due to be loaded at some point in the future. To enable the updating of template pages using page background text files, ensure that the Support remote updates in background box is checked.

9.66.1.12   Wait for take after going online check box

This is a legacy settings to mirror how earlier versions of the CG Tools software operated after going online. In earlier versions of the software, the software would take the first page automatically after going online. The software now waits for a take before starting playout and as a result this check box does not require selection.

9.66.2   Scripting dialog tab

To configure job scripting preferences, follow the step below.

- Select the Scripting dialog tab on the <u>Job Preferences dialog box</u> 679 . The Scripting dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
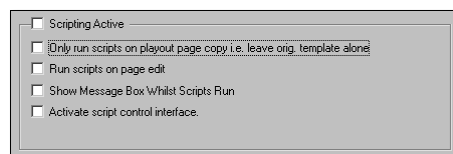
SEE ALSO

<u>Page and field scripting</u> 528

9.66.2.1   Activate script control interface check box

If you are using a template job that utilises scripting within pages, this can cause problems for a Pixel Power Control Centre (PPCC) that scans the template job or an ActiveX control that uses the template job. See Bug Fixes>7.0.3.3 for more information on the potential problem.

To enable the script communication between the CG Tools software and a PPCC or ActiveX control, ensure that the Activate script control interface box is checked. This box is cleared (the option is turned off) by default, and hence for customers who are not using template scripting communication, the feature will not be used and the problem documented in bugs 1189 and 1190 will not occur. If the Activate script control interface box is checked, the feature is turned on and a workaround is also implemented, causing the CG Tools software automatically re-register the proxy stub DLL immediately after any call to any scripts that may cause Windows registry corruption.

9.66.2.2   Only run scripts on playout page copy i.e. leave orig. template alone check box

When running a job containing template pages under the control of an automation system, it is desirable to run page scripts on the copied version of a page and not the original template page. This ensures that template pages within the job maintain their formatting, field structure and look. To enable the running of script only on template pages, ensure that the Only run scripts on playout page copy i.e. leave orig. template alone box is checked.

9.66.2.3   Run scripts on page edit check box

If desired, you can configure the software to run any scripts attached to a page when the page is opened for editing in the Graphic Edit window . To enable this, ensure that the Run scripts on page edit box is checked.

9.66.2.4   Scripting Active check box

To enable the parsing of scripts for the current job, ensure that the Scripting Active box is checked. Options relating to the operation of scripting for the current job are enabled in the related group box.

9.66.2.5   Show Message Box Whilst Scripts Run check box

You can optionally configure the software to show a message box whilst scripts are being parsed. This provides the operator with information about what scripts are being parsed during page playout or editing. To enable the display of a message box whilst scripts are being run, ensure that the Show Message Box Whilst Scripts Run box is checked.

9.67   Job Maintenance dialog box

The Job Maintenance dialog box enables you to conduct maintenance on the current job.

- To display the Job Maintenance dialog box, select File> 378 Job Maintenance 383 . The Job Maintenance dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
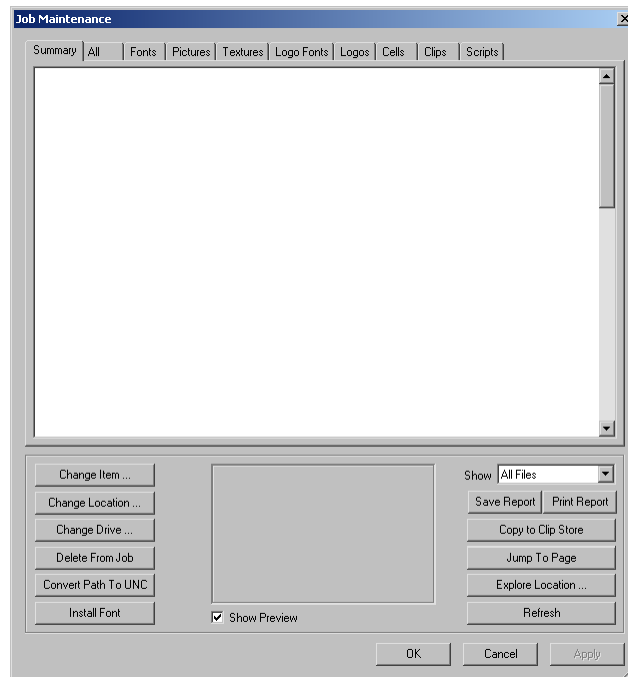
9.67.1   Change Drive button

With an associated file or multiple files selected from the relevant dialog tab, select the Change Drive button. The Browse for Folder dialog box is displayed (or the Clarity Explorer 362 in the case of clips), showing the current drive of the selected file.
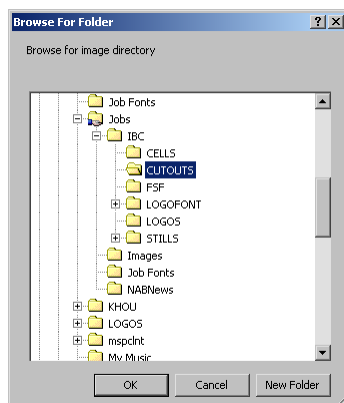
Browse to the drive where the new file or files are located, then select OK to revert back to the Job Maintenance dialog box

9.67.2 Change Item button

With an associated file selected from the relevant dialog tab, select the Change Item button. Depending on the type of associated file selected, a dialog box is displayed enabling the selection of a different file. Refer to the table below.

File type	Dialog box
Cell	Open Cel Animation dialog box ⌐751⌐
Clip	Clarity Explorer ⌐362⌐
Font	Select Font dialog box ⌐797⌐
Logo Font	Open Logo Font dialog box ⌐564⌐
Logo	Insert Logo dialog box ⌐673⌐
Picture	Open Cutout Picture dialog box ⌐749⌐
Script	Open dialog box ⌐748⌐
Texture	Open Texture Picture dialog box ⌐750⌐

9.67.3 Change Location button

With an associated file or multiple files selected from the relevant dialog tab, select the Change Location button. The Browse for Folder dialog box is displayed (or the Clarity Explorer ⌐362⌐ in the case of clips), showing the current location of the selected file.
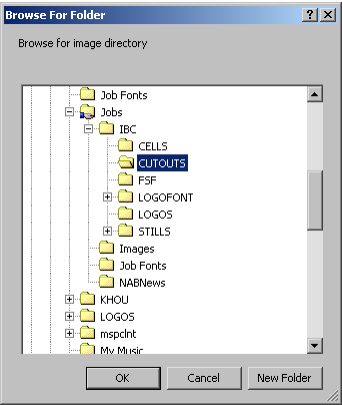
Browse to the folder where the new file or files are located, then select OK to revert back to the Job Maintenance dialog box

9.67.4 Convert Path To UNC button

With an associated file or multiple files selected from the relevant dialog tab, select the Convert Path To UNC button to convert Windows network file paths to Universal Naming Convention (UNC) paths.

e.g. `C:\DEMOPIC\NEWS` is converted to `\\<machinename>\C$\DEMOPIC\NEWS`

9.67.5 Copy to Clip Store button

If a clip referenced by the current job is located on the local emulated clip store and there is a physical clip store available on the local system, then you have the option of copying the clip from the emulated clip store to the physical clip store. The path to that clip from within the job is updated to reference the copy on the physical clip store. With a clip selected from the Clips dialog tab that is located on the emulated clip store, select Copy to Clip Store to copy it to the local physical clip store.

NOTE

When you load a job that references clips that have been loaded from an emulated clip store, you can configure that they are copied to a local physical clip store automatically using the Copy clips from the Emulated Clip Store to the Local Clip Store on job load group box 712 on the Clip Store Emulation dialog tab 710 on the User Preferences dialog box 809.

9.67.6   Delete From Job button

With an associated file or multiple associated files (using SHIFT or CTRL) selected from the relevant dialog tab, select the Delete From Job button to delete the selected associated file(s) from the current job.

9.67.7   Dialog tabs

All dialog tabs (except Summary 691) display lists of associated files in the same manner. Information columns may differ depending the dialog tab. Missing files are highlighted in red. The subsequent sections document the information columns available with each dialog tab.

To perform an action on an associated file, select the file using the mouse to highlight it in blue. Multiple files can be selected using CTRL or SHIFT together with the mouse. If a selected file is found, it may be previewed in the Preview window 692 if the Show Preview box 693 is checked.

9.67.7.1   All dialog tab

Displays all associated files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated files are located.	`<nnnn>`
Location	Displays the file path of associated files.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated files.	`<Filename.XYZ>`
Type	Displays the type of associated files.	`Picture` `Font` `Texture` `Logo` `Logo Font` `Cel` `Clip` `Script`
Status	Shows whether associated files are missing or found. Missing files are highlighted in red.	`Missing` `Found`

9.67.7.2 Cells dialog tab

Displays associated cel animation files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated cel animations are used.	`<nnnn>`
Location	Displays the file path of associated cel animations.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated cel animations with the .CEL file extension.	`<Filename.CEL>`
Status	Shows whether cel animation files are missing or found. Missing cels are highlighted in red.	`Missing` `Found`

9.67.7.3 Clips dialog tab

Displays associated video and audio clip files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated clips are used.	`<nnnn>`
Location	Displays the file path of associated clips.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated clips.	`<Filename.CEL>`
Type	Displays the type of associated clip. This can either be a pasted foreground clip or a page background clip.	`PasteClip` `Background`
Status	Shows whether associated clips are missing or found. Missing clips are highlighted in red.	`Missing` `Found`

9.67.7.4 Fonts dialog tab

Displays associated fonts files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated fonts are used.	`<nnnn>`
File	Displays the filenames of associated fonts with the .TTF file extension (Windows True Type).	`<Filename.TTF>`
Font Name	Displays the Windows font name of associated fonts.	`<Fontname>`
Installed	Shows whether fonts are installed on the local system.	`Yes` `No`
Status	Shows whether associated fonts are missing or found. Missing fonts are highlighted in red.	`Missing` `Found`

NOTE

Fonts that are located in the local `Job Fonts` folder but as yet are not installed on the local system are highlighted in red.

9.67.7.5 Logo Fonts dialog tab

Displays associated logo font files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated logo fonts are used.	`<nnnn>`

Column	Description	Variables
Location	Displays the file path of associated logo fonts.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated logo fonts with the .PPL file extension.	`<Filename.PPL>`
Status	Shows whether associated logo fonts are missing or found. Missing logo fonts are highlighted in red.	`Missing` `Found`

9.67.7.6 Logos dialog tab

Displays associated logo files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated logos are used.	`<nnnn>`
Location	Displays the file path of associated logos.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated logos.	`<Filename.XYZ>`
Status	Shows whether associated logos are missing or found. Missing logos are highlighted in red.	`Missing` `Found`

9.67.7.7 Pictures dialog tab

Displays all associated picture files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated pictures are used.	`<nnnn>`
Location	Displays the file path of associated pictures.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated pictures.	`<Filename.XYZ>`
Type	Displays the type of associated picture. This can either be a foreground cutout or page background.	`Cutout` `Background`
Status	Show whether associated pictures are missing or found. Missing pictures are highlighted in red.	`Missing` `Found`

9.67.7.8 Scripts dialog tab

Displays all associated script files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated scripts are used.	`<nnnn>`
Location	Displays the file path of associated scripts.	`<Drivename>` `<FolderName>`
File	Displays the filenames of associated scripts. At the moment only Visual Basic files are supported (.VBS)	`<Filename.VBS>`
Type	Displays the type of associated script. There are a variety of different script types, based on what they are linked to within a page.	

	Page based scripts can be linked using the <u>*Automation dialog tab*</u> 754 *on the* <u>*Page Settings dialog box*</u> 751.	`Page Pre`
		`Page Post`
		`Page Background`

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   690

Copyright © 2000-2006 Pixel Power Ltd.

Column	Description	Variables
	Page element scripts can be configured for each element using the relevant [Automation control tab] 270 on the [Graphic Tools] 266.	Field Marker Cell Animation Cutout Paste Live Clip
Status	Shows whether associated scripts are missing or found. Missing scripts are highlighted in red.	Missing Found

9.67.7.9   Summary dialog tab

Displays a summary for the current job. This dialog tab differs from the others in that is displays a HTML formatted summary of information for the entire job. It also displays job information imported from the [Job Properties dialog box] 694. The summary can be saved using the [Save Report button] 693 or printed using the [Print Report button] 692. If missing files are reported in the HTML summary, then a warning message is displayed at the top of the Summary dialog tab.

SEE ALSO

[Example summary] 691

9.67.7.9.1   Example summary

Below is an example HTML summary:

9.67.7.10   Textures dialog tab

Displays all associated texture files linked to the current job.

Column	Description	Variables
Page	Displays the pages on which associated textures are used.	<nnnn>
Location	Displays the file path of associated textures.	<Drivename> <FolderName>
File	Displays the filenames of associated textures.	<Filename.XYZ>
Status	Shows whether associated textures are missing or found. Missing textures are highlighted in red.	Missing Found

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

9.67.8 Explore Location button

With an associated file selected from the relevant dialog tab that is FOUND, select the Explore Location button to display the Windows Explorer (or Clarity Explorer 362 in the case of clips) showing the selected associated files' location.
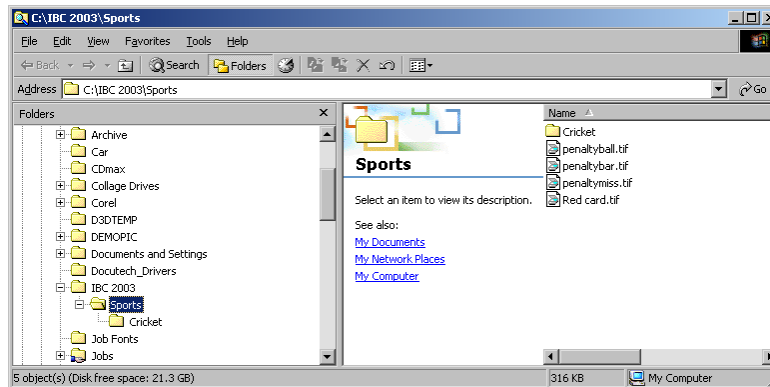
9.67.9 Install Font button

If a job uses a particular font that is present in the local `Job Fonts` folder but is not installed on the host system (in the `C:\WINNT\FONTS` folder), then it can be installed by selecting the Install Font button. With a font selected from the Fonts dialog tab, select the Install Font button to install it to the local system.

NOTE

Performs the same functionality as the Font Warning dialog box 645 that is shown when you load a job with missing fonts.

9.67.10 Jump To Page button

With an associated file selected from the relevant dialog tab, select the Jump To Page button to open the page referencing the file in the Graphic Edit window 260, with the file selected.

9.67.11 Preview window

If available, displays a graphical preview of the selected file.

9.67.12 Print Report button

Select the Print Report button to print the current HTML based report shown by the Summary dialog tab 691. The standard Microsoft Windows Print dialog box is displayed.

9.67.13 Refresh button

Select the Refresh button to refresh the list of associated files displayed by the current dialog tab or the HTML report displayed by the Summary dialog tab 691.

9.67.14 Save Report button

Select the Save Report to save the current HTML based report shown by the <u>Summary dialog tab</u> 691. The standard Internet Explorer Save Web Page dialog box is displayed, enabling you to browse to a location where you can save the report.
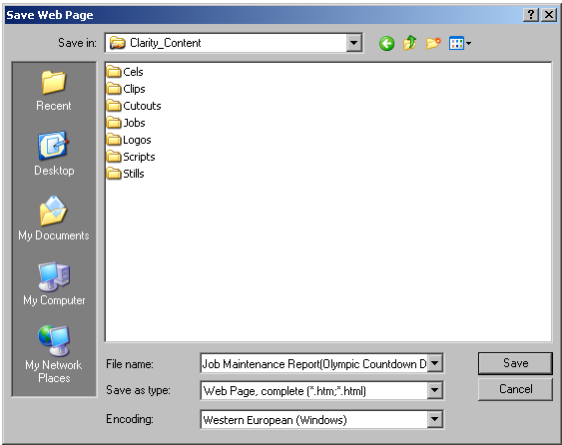
HTML summary reports are named by default using the following convention:

```
Job Maintenance Report(JOBNAME) - DATE TIME.htm
```

Variable	Description
JOBNAME	Exact name of current job.
DATE	Time that the report was conducted in the form DAY-MONTH-YEAR.
TIME	Time that the report was conducted in the form HOURS-MINUTES-SECONDS.

9.67.15 Show drop-down list box

The Show drop-down list box enables associated files of differing criteria to be displayed by all dialog tabs. Refer to the table below.

Command	Displays
All Files	All associated files.
Found Files	Associated files that can only be found.
Missing Files	Associated files that are missing.
Network Files	Associated files that are located on a network location (a location other than the system local drives).

9.67.16 Show Preview check box

Check the Show Preview box to enable the display of file previews in the Preview window when available.

9.68   Job Maintenance - Applying Updates dialog box

The Job Maintenance - Applying Updates dialog box is shown after applying any changes to locations or items using the Job Maintenance dialog box ⌐686⌐.
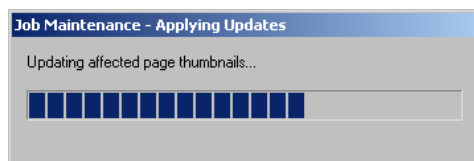
It displays the progress of the updates including the updating of page previews shown in the Page Browser ⌐251⌐ to reflect new page content.

SEE ALSO

Job Maintenance dialog box ⌐686⌐
Page Browser ⌐251⌐

9.69   Job Properties dialog box

The Job Properties dialog box displays the properties of the current job.

- To display the Job Properties dialog box, select File> ⌐378⌐Job Properties ⌐383⌐. The Job Properties dialog box is displayed.
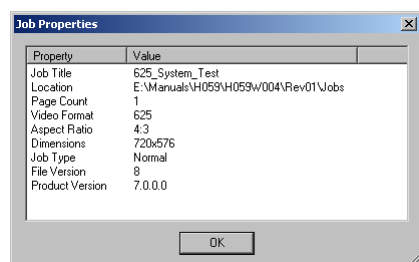
Property	Description	Variables
Job Title	Save name of job.	`<Filename.PPJ>`
Location	Save location path of job.	`<Drivename>` `<FolderName>`
Page Count	Number of pages.	`<nnnn>`
Video Format	Video format of the first page in the job.	See Video Standards ⌐547⌐.
Aspect Ratio	Aspect ratio of the first page in the job.	See Aspect Ratios ⌐548⌐.
Dimensions	Dimensions in pixels calculated from the video format and aspect ratio.	`<nnnn> x <nnnn>`
Job Type	Saved job type.	`Normal, Multiple, Single`
File Version	Internal file version of the job.	`<nn>`
Product Version	Version of the CG Tools software in which the job was last saved.	`<n.n.n.n>`

9.70   JPEG Image Options dialog box

The JPEG Image Options dialog box is displayed in circumstances where you are saving <u>JPEG images</u> [1130] from the CG Tools software. For example, when saving the background layer of a page to an image using <u>Background></u> [419] <u>Save Background</u> [420]. After selecting the JPEG file format on the <u>Save Background Image dialog box</u> [781] and selecting OK, the JPEG Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
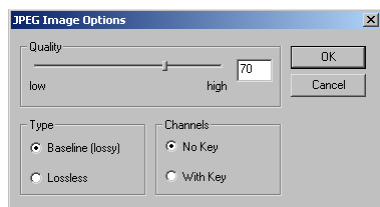
9.70.1   Quality group box

The controls in the Quality group box enable the configuration of JPEG quality as a percentage. Drag the slider bar using the mouse or enter a value in the adjacent text box (`0-100`).

9.70.2   Type group box

The controls in the Type group box enable the selection of whether the JPEG image is saved with <u>lossy</u> [695] or <u>lossless</u> [695] compression.

9.70.2.1   Baseline (lossy) radio button

Select the Baseline (lossy) option to save JPEG image with <u>lossy</u> [1130] compression.

9.70.2.2   Lossless radio button

Select the Lossless option to save JPEG image with <u>lossless</u> [1130] compression.

9.70.3   Channels group box

Select whether to save the JPEG image <u>with</u> [695] or <u>without</u> [695] its key/alpha channel.

9.70.3.1   No Key radio button

Select the No Key option to omit the key/alpha channel from the saved JPEG image.

9.70.3.2   With Key radio button

Select the With Key option to include the key/alpha channel with the saved JPEG image.

9.71 Local Preferences dialog box

The Local Preferences dialog box enables the configuration of a variety of local settings specifically for the current system. To display the Local Preferences dialog box where software configuration can be achieved, follow the steps below:

- Select Options> 429 Preferences>Local Preferences 430. The Local Preferences dialog box appears.

The Local Preferences dialog box contains up to fifteen dialog tabs. Some dialog tabs may not be visible due to software or hardware restrictions. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of	Clarity	PREP
Audio Settings 697	System audio options including I/O configuration 697, audio routing 699, audio metering and test tone 702 and video association 703 [CLARITY].	■	
Automation 704	Automation options including code page usage 707, use of local images 705 and jobs 705 before resolving UNC paths and wait/response 707 timing.	■	■
Caching 707	Software caching options including image 707 and smart cache 708.	■	■
Clip Store 708	Clip store options including creating 709, formatting/unformatting 710, benchmarking 709, analysing 709 and renaming 710 volumes [CLARITY].	■	
Clip Store Emulation 710	Clip store emulation configuration including local path 711 and clip copy mode 712.	■	■
FTP Server 713	Local Clarity FTP server settings including enabling the server 713, FTP port configuration 713 and browse frame image types 713.	■	■
General 714	General software options including auxiliary output settings 714, Clarity job load 715, debug flushing 715, default clip channel assignment 715, default global custom animations folder 716, DirectDraw® system settings 716, field marker options 717 and loop through 717.	■	■
GPI Triggers 718	Configure the GPI's available with your system to trigger animations [CLARITY].	■	■
Keyboard 718	RapidAction keyboard specific options including RapidAction keyboard file location 719, reprogramming 720 and configuration 720. Also displays information regarding a connected Contour Designs USB Shuttle device 722.	■	■
QuickLoads 722	Definition and configuration of settings enabling jobs to be loaded quickly including quick load job filename 723, user interface name 723 and whether a job is loaded on application startup 723.	■	■
Rack 724	Rack monitoring options and parameters including rack name 727, temperature status 728, door illumination 725 and fault condition status 726 [CLARITY].	■	
Ramcorder 728	Ramcorder specific options including caching configuration 728 and frame buffer 729.	■	■
SNMP 729	Enables a Clarity system unit to act as an SNMP 538 agent 730 and to trap 730 alerts from an explicit Hostname or IP address.	■	■
Still Store 730	Still Store options including the maintenance of still directories 731, directory search order 731 and Pixel Browser administrator settings 730.	■	■
Timecode/VTR 732	VTR specific options including VTR port usage 732, VTR emulation 733, VTR control 733 and channel timecode settings 734 [CLARITY].	■	

SEE ALSO

Options> 429 Preferences>Local Preferences 430.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   696

Copyright © 2000-2006 Pixel Power Ltd.

9.71.1 Audio Settings dialog tab [CLARITY]

Audio configuration is achieved using the Audio Settings dialog tab on the Local Preferences dialog box 696. The Audio Settings dialog tab is comprised of up to six sub-tabs; two relating to the configuration of audio routing for channels A/B, two relating to the audio input/output for channels A/B, the fifth relating to channel generic audio metering and test tone configuration and the final tab enables configuration of video associations. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Sub-tab	Enables configuration of
Chan A/B I/O 697	The Chan A I/O and Chan B I/O dialog sub-tabs enable the configuration of audio formats and delays for AES/EBU and embedded audio stereo pairs, the configuration of embedded audio settings (extraction and insertion groups and their selection, format and status) and the output level of the line level analogue stereo pair.
Chan A/B Routing 699	The Chan A Routing and Chan B Routing dialog sub-tabs enable the mapping of external audio inputs/output connectors through the software routing matrix, thus dictating how the software processes audio signals passed to and from the external inputs/outputs.
Meters/Test Tone 702	The Meters/Test Tone dialog sub-tab enables the configuration of the various audio meters available when working with audio. This tab also enables the configuration of the internal test tone source.
Video Associations 703	The Video Associations dialog sub-tab enables video to be associated with different audio signals.

9.71.1.1 Chan A/B I/O dialog sub-tab

To configure software audio input and output settings, follow the steps below:

- Select the Chan A I/O or Chan B I/O dialog sub-tab on the Local Preferences dialog box 696. The relevant I/O dialog sub-tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
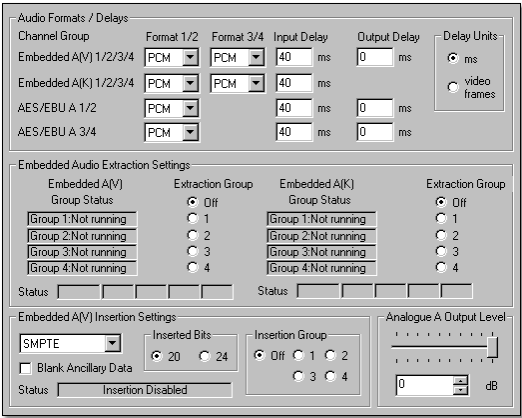
9.71.1.1.1 Analogue A/B Output Level group box

If desired, you can configure the analogue output level for monitoring audio supplied via the analogue stereo pair on your chosen system. Adjust the Analogue A/B Output Level slider or enter a new value in the adjacent increment box.

NOTE

This is different to adjusting the source gain for the analogue stereo pair. For more information on adjusting the source gain of audio source signals, see AES/EBU Mixer Settings group box 700.

697   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.71.1.1.2 Audio Formats / Delays group box

Audio Format drop down list boxes

```
(PCM, Data)
```

You can configure the audio format used for AES/EBU and embedded audio signals by selecting either `PCM` or `DATA`. For more information on the differences between the PCM ⌐445⌐ and Data ⌐445⌐ formats and the situations in which they should be used, see audio formats ⌐444⌐. This `Data` setting is useful when using audio that is encoded in a proprietary format (e.g. Dolby E ⌐1130⌐) that you want to pass through the Clarity system architecture without being processed.

Separate formats can be specified for each pair within the embedded group using the Format 1/2 and Format 3/4 drop-down list boxes.

Input and Output Delay text boxes

```
(n m/s) or (n frames)
```

You can configure an audio signal delay for AES/EBU and embedded audio signals by editing the values in the Input Delay and Output Delay text boxes. For more information about audio delays and the situations in which delays should be used, see audio delays ⌐443⌐.

Delay Units group box

Select the format in which audio delays are expressed by selecting either the ms (milliseconds) or video frames option.

SEE ALSO

Audio formats ⌐444⌐
Audio delays ⌐443⌐
Audio delay schematic ⌐1079⌐
http://www.dolby.com/professional/pro_audio_engineering/solutions_dolbye.html

9.71.1.1.3 Embedded Audio Extraction Settings group box

Enables monitoring and the configuration of how embedded audio is extracted from the VID IN (V) and KEY IN (K) inputs for the selected channel.

Embedded A/B (V) (K) Group Status indicator boxes

These indicator boxes show which audio groups are present on the related channel input.

Status	Colour	Description
20 Bit	**GREEN**	20 bit audio available.
24 Bit	**GREEN**	24 bit audio available.
Not Present	**RED**	No audio or data present.
Not Running	**GREY**	No input stream.

Extraction Group radio buttons

Enables the selection of which input embedded audio group should be extracted as the source for the systems' input embedded audio. Select the input group that you want to extract audio from using the 1, 2, 3 and 4 options. If the Off option is selected, no embedded audio will be extracted.

Status indicator boxes

These indicator boxes indicate which group is being extracted and the type of data available on each of the mono channels for that group.

Group 1, 2, 3, 4	Colour	Description
Audio	**GREEN**	Audio is available on the related mono channel.
Data	**ORANGE**	Data is available on the related mono channel.
<blank>	**GREY**	No audio or data available.

9.71.1.1.4   Embedded A/B (V) Insertion Settings group box

Enables configuration of how embedded audio is inserted into the VID OUT (V) output for the selected channel. The system outputs the four mono channels of audio on a single group. The output embedded audio can be configured to be on the same group as the input, in which case it will replace the input audio; or on a different group, in which case it will output in addition to the input audio (assuming there is sufficient embedded data space free for the audio packets).

Inserted Bits group box

Select whether embedded audio is output to 20-bit or 24-bit resolution (word length) using the 20-bit and 24-bit options.

Insertion Group group box

Select the insert group that you want to write embedded audio to using the 1, 2, 3 and 4 options. If the Off option is selected, no embedded audio will be output and the Status indicator box will indicate that insertion is disabled.

Status indicator box

Displays the status of embedded audio/data insertion.

Status	Colour	Description
Insertion OK	**GREEN**	Embedded audio/data is being inserted on the selected insertion group.
Insertor deleting existing group	**GREEN**	Blanking existing group (Blank Ancillary Data check box is checked).
Insertor has no ANC space	**RED**	No available room for re-insertion of embedded audio/data.
Insertion Disabled	**GREY**	No insertion (Off is selected for the desired input in the Insertion Group group box).

Blank Ancillary Data check box

Select the Blank Ancillary Data box to re-blank all embedded audio/data before new embedded audio/data is re-inserted in the selected group. The `Insertor deleting existing group` status is shown in the Status indicator box.

<Insertion Standard> drop down list box

`(SMPTE, SONY)`

Select the desired insertion standard using the drop-down list box.

9.71.1.2   Chan A/B Routing dialog sub-tab

To configure software audio routing, follow the steps below:

- Select the Chan A Audio Routing or Chan B Audio Routing dialog sub-tab on the <u>Local Preferences dialog box</u> 696. The relevant Audio Routing dialog sub-tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
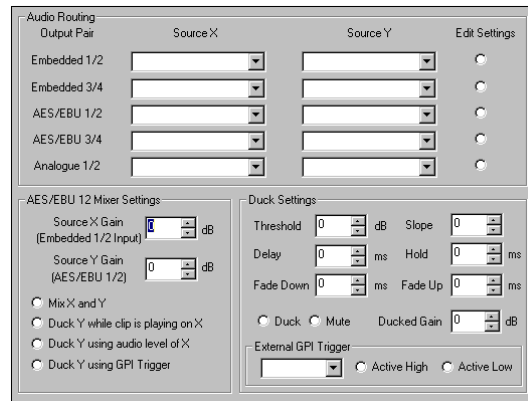
9.71.1.2.1 AES/EBU Mixer Settings group box

If an AES/EBU source was selected for the desired Output pair using the Source X and Y drop-down list boxes, then some or all of the controls in this group box will become enabled.

This group box enables the configuration of gain and mixer values for SOURCE X and/or SOURCE Y. Also, if your source signal selection permits, you can select to mix SOURCE X and SOURCE Y or select one of three ducking effects which can then be subsequently configured using the Duck Settings group box.

For more information about the Output pairs that you can select, see Output pairs 446. For more information about the X and Y source signals that you can select, see X and Y audio sources 447.

Source X and Y Gain increment boxes
`(-96 db to 48 db)`

Enables the configuration of the amount of gain, if any, that is applied to the SOURCE X and Y audio signals. The selected source signal pair is shown e.g. AES/EBU 1/2.

Mix and Duck radio buttons

Select whether to mix SOURCE X and Y or to duck SOURCE Y using three different models.

For more information on the mix effect, refer to Mixing 444. For more information on the three ducking effects, refer to Ducking 444.

SEE ALSO

Audio Routing group box 700
Duck Settings group box 701
Audio routing schematic (PDF) 1080

9.71.1.2.2 Audio Routing group box

This group box enables the mapping of audio inputs or sources through the internal routing architecture and onto a selected output. Whilst passing through the system, these audio signals can be subjected to numerous ducking or mixing effects.

Simply select the Output pair from which you want to transmit the audio signal; then select an X and/or Y source using the drop down list boxes.

For more information about the Output pairs that you can select, see Output pairs 446. For more information about the X and Y source signals that you can select, see X and Y audio sources 447.

If you selected an AES/EBU X and/or Y source, then you can configure gain, mixer and/or ducking settings using the controls in the AES/EBU Mixer Settings group box 700 and Duck Settings group box 701.

SEE ALSO

Audio routing schematic (PDF) |1080|

9.71.1.2.3   Duck Settings group box

The Duck Settings group box enables the configuration of audio ducking settings for the ducking audio effect selected using the radio buttons in the AES/EBU 12 Mixer Settings group box |700|.

Some parameters do not apply to some audio ducking effects.

Active High radio button

Select this option to ensure that ducking is actioned and maintained whilst the select GPI trigger is active in the high state.

Active Low radio button

Select this option to ensure that ducking is actioned and maintained whilst the select GPI trigger is active in the low state.

Attack increment box
```
(0 ms to 5000 ms)
```

How fast the gain on the SOURCE Y level is reduced in response to an increase in the SOURCE X level above the threshold. Fast attack rates result in unnatural fluctuations in SOURCE Y signal dynamic.

Delay increment box
```
(0 ms to 500ms)
```

Delays the start of the ducking.

Ducked Gain increment box
```
(-144 db to 0 db)
```

The minimum gain level in db that will occur.

Duck radio button

Select this option to duck the relevant signal for the selected effect.

External GPI Trigger drop-down list box
```
(GPI0 - GPI 7)
```

Select the desired GPI source (there are 4 per channel).

Fade Down increment box
```
(0.1 to 5000 ms)
```

How fast the gain on the SOURCE Y level is reduced.

Fade Up increment box
```
(0.1 to 5000 ms)
```

How fast the gain on the SOURCE Y level is increased.

Hold increment box
```
(0 ms to 5000 ms)
```

How long the ducking remains active once SOURCE X signal falls below the threshold.

Mute radio button

Select this option to mute the relevant signal for the selected effect.

Release increment box
```
(0 ms to 20000 ms)
```

How fast the gain on the SOURCE Y level is restored to normal levels after the SOURCE X signal falls below the threshold. A fast release will cause and the output signal is "choppy" or "jittery" as the gain is changed rapidly.

Slope (Ratio) increment box
`(0.1 to 100)`

The amount of gain reduction which takes effect after the threshold is exceeded, if a 2:1 ratio is selected (by setting the Slope increment box to 2), a 12 db increase in the level of SOURCE X will be reduced to 6 db at SOURCE Y.

Threshold increment box
`(-96 db to 0 db)`

The level of SOURCE X past which ducking will begin to take effect on SOURCE Y.

SEE ALSO

AES/EBU Mixer Settings group box ⌐700⌐
Audio Routing group box ⌐700⌐
Ducking ⌐444⌐
Audio routing schematic (PDF) ⌐1080⌐

9.71.1.3   Meters/Test Tone dialog sub-tab

To configure audio metering and test tone, follow the steps below:

- Select the Meters/Test Tone dialog sub-tab on the Local Preferences dialog box ⌐696⌐. The Meters/Test Tone dialog sub-tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
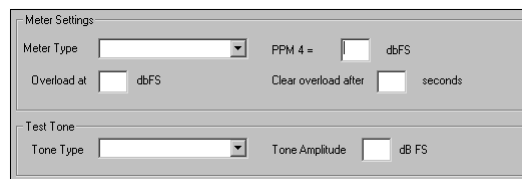
SEE ALSO

Input Audio Meters shortcut menu ⌐327⌐
Output Audio Meters shortcut menu ⌐328⌐
Audio metering ⌐445⌐
Audio metering status ⌐329⌐
Digital ⌐446⌐
PPM (Peak Program Meters) ⌐446⌐
VU (Volume Unit) ⌐446⌐

9.71.1.3.1   Meter Settings group box

Meter Type drop-down list box

Select a meter type from the following list:

Type	Description
PPM (DIN) ⌐446⌐	Rises to -1db of steady state in 10ms, decays by 20db in 1.5s.
PPM (BBC) ⌐446⌐	Rises to -1db of steady state in 10ms, decays by 24db in 2.8s.
PPM (Nordic) ⌐446⌐	Rises to -1db of steady state in 10ms, decays by 20db in 1.7s.
VU ⌐446⌐	300ms integration time, decays 20db in 300ms.
VU (Extended) ⌐446⌐	Rises to -1db of steady state in 10ms, decays by 20db in 1.7s.
Digital ⌐446⌐	Instant attack, decays by 20db in 1.5s.

Meter 0db/PPM 4 =/0VU text box

Enter a value in dbFS to configure the meter offset.

Overload at text box

Enter a value in dbFS to configure the overload setting for the selected meter type.

Clear overload after N seconds text box

Enter a value in seconds to configure the time after which the meter overload is cleared.

SEE ALSO

Input Audio Meters shortcut menu [327]
Output Audio Meters shortcut menu [328]
Audio metering [445]
Audio metering status [329]
Digital [446]
PPM (Peak Program Meters) [446]
VU (Volume Unit) [446]

9.71.1.3.2 Test Tone group box

Test Tone drop-down list box

The steady tone is mainly just to set levels, and to identify that a signal is present. The two stereo tone types are standard tones that can also identify which is the left and right channel of a pair, and the GLITS tone can also diagnose some other phasing problems.

Select a test tone from the following list:

Tone	Description
1kHz Steady Tone	Steady tone.
1kHz Stereo EBU Tone	European standard tone that has 1kHz tone on both channels, but with the left channel only muted for 250 milliseconds every 3 seconds.
1kHz Stereo GLITS Tone	BBC stereo test tone that has 1kHz tone on both channels, but with a repeating sequence of a mute of the left channel, followed by 2 mutes on the right channel. Each mute is 250 milliseconds long, with 750 milliseconds between the mutes, and with the whole sequence repeating every 4 seconds.

Tone Amplitude text box

Enter a value in dbFS to configure the amplification setting for the selected text tone.

9.71.1.4 Video Associations dialog sub-tab

To configure video and audio associations, follow the steps below:

- Select the Video Associations sub-tab on the Local Preferences dialog box [696]. The Video Associations dialog sub-tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

703   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
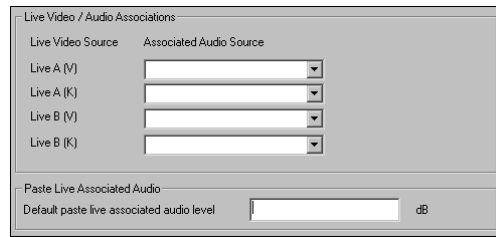
9.71.1.4.1　Default paste live associated audio level text box

`(+/-0 db)`

As pasted live objects are played out, or the DSK state switched, the audio output will follow that associated with the respective video source. Pasted live objects can have gain values set so that audio is attenuated by the specified amount, with the level fading up to unity gain when the video is triggered to full-screen, with other obscured live sources fading down to zero. This gain level can be configured using the Default paste live associated audio level text box.

9.71.1.4.2　Live Video / Audio Associations group box

The default audio source is the 1st stereo pair of embedded audio from the video source. Use relevant the Associated Audio Source drop-down list box to select an available audio source to be associated with the desired live video source.

For more information on the list audio sources available with your system unit, see X and Y audio sources 447.

9.71.2　Automation dialog tab

To configure software automation settings, follow the steps below:

- Select the Automation dialog tab on the Local Preferences dialog box 696. The Automation dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
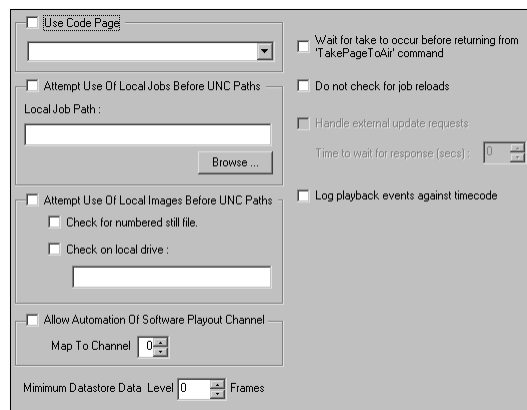
You can configure a Clarity system to search locally for jobs 705 and/or images 705 first before resolving UNC paths used by the Active X controls and Pixel Power Control Centre. This can help speed up response times. Optionally, a code page can be selected 707 to interpret single byte character codes supplied by automation systems. Also, a Clarity system can be configured to wait for a page to be taken to air 707 before responding to an automation system.

When Clarity is under automation control, some automation systems (ProBel) send job load requests prior to every command to ensure that the latest job is loaded. You can optionally configure the software not to check for job reloads 706.

Text fields that are formatted to be updated with external data during online playout can cause delays if the data source

is not available when the page is prepared. This can cause the software to pause for a defined period of time. Learn more about how to configure whether selected fields send a request to be updated [706] during page preparation and the duration for which the software should wait to receive the data [707] before moving to the next field.

9.71.2.1 Attempt Use Of Local Images Before UNC Paths group box

In previous versions of the software, playout Clarity systems could not be configured to try and pick up a local version of the image file first to save time and system resources. This is because the system passed around still numbers instead of full UNC paths to the images.

This has now changed because many customers were unable to configure all still directories correctly, meaning they did not get the images they expected during playout. Now that the Active X controls and Pixel Power Control Centre pass around full network paths for all the images, an option has been added to the CG Tools software to enable users to indicate that the software should try and find images locally first.

Check the Attempt Use of Local Images Before UNC Paths box to configure the system to try and find images locally first.

9.71.2.1.1 Check for numbered still file check box

If you want still numbered images to be included when attempting to find local images, check the Check for numbered still file box.

9.71.2.1.2 Check on local drive check box and drop-down list box

```
(drive)
```

To specify the drive on the local machine that should be searched for local images, check the Check on local drive box and select an available drive from the adjacent drop-down list box.

9.71.2.2 Allow Automation Of Software Playout Channel group box

To enable an automation system to control the software playout channel, ensure that the Allow Automation Of Software Playout Channel box is checked, then configure channel mapping using the Map to Channel increment box [705].

9.71.2.2.1 Map To Channel increment box

```
(channel ID 0-5)
```

Using the Map To Channel increment box, specify the channel ID that is being sent by the connected automation system that will be interpreted and mapped to control the UI channel.

SEE ALSO

Available channels [343]

9.71.2.3 Attempt Use Of Local Jobs Before UNC Paths group box

In previous versions of the software, playout Clarity systems could not be configured to try and pick up a local versions of job files first to save time and system resources. Now that the Active X controls and Pixel Power Control Centre pass around full network paths for jobs, an option has been added to the CG Tools software to enable users to indicate that the software should try and find jobs locally first in a user specified location on the local system.

Check the Attempt Use of Local Jobs Before UNC Paths box to configure the system to try and find jobs locally first.

9.71.2.3.1 Local Job Path text box

```
(folder)
```

Enter the file path in the Local Job Path text box of the folder on the local system that should be searched for local jobs or select the Browse button.

After selecting Browse, the Browse for Folder dialog box is displayed.
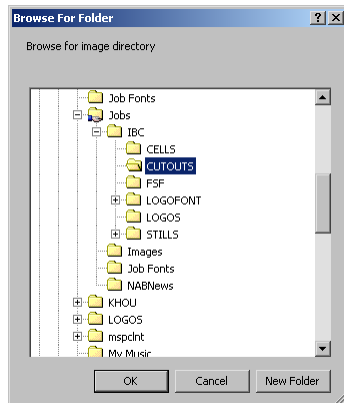
Browse to the folder that should be searched for local jobs, then select OK to revert back to the User Preferences dialog box [809].

9.71.2.4 Do not check for job reloads

When Clarity is under automation control, some automation systems (ProBel) send job load requests prior to every command to ensure that the latest job is loaded. If graphic departments are updating a job on a regular basis, then there is a requirement for the updated job to be loaded only after a specific request is received. The Do not check for job reloads check box enables the user to stop the CG Tools software loading a version of the current job automatically that features a later date and time stamp. A newer version of the job will only be loaded when a explicit request is received.

9.71.2.5 Handle eXternal update requests check box

To stop fields requesting external data in situations where a particular data source is not available, ensure that the Handle eXternal update requests box is cleared.

9.71.2.6 Log playback events against timecode check box

It may be desirable to log playback events that are actioned whilst the CG Tools software is online against timecode to aid fault finding. To enable logging against timecode events, ensure that the Log playback events against timecode box is checked. Logging is maintained within the following folder:

`C:\Program Files\Pixel Power Ltd\PixelPowerApplicationLogs\CG Tools\HardwareLogFiles`

SEE ALSO

CG Tools application logs [1055]

9.71.2.7 Minimum Datastore Data Level increment box

`(n frames)`

When data stores are driven via automation, you can receive feedback to tell you when they are running low on data. The Minimum Datastore Data Level increment box enables you to set that level. The level is the time in frames until the data in the data store runs out.

SEE ALSO

Data Store Viewer [329]
Data stores [468]

9.71.2.8   Time to wait for response (secs) text box

To define the delay in seconds for which the software should wait before moving to the next available field, enter the desired duration within the Time to wait for response (secs) text box.

9.71.2.9   Use Code Page group box

In rare situations where an automation system is sending commands and information to a Clarity system using single byte character codes (two byte character codes are the norm), the Clarity system needs to interpret these character codes using a user defined <u>code page</u> 540.

Select the desired code page that will interpret the character codes using the drop-down list box.

9.71.2.10   Wait for take to occur before returning from 'TakePageToAir' command check box

When using a Clarity system in conjunction with an automation system, is generally acceptable for Clarity system to respond immediately after receiving a `TakePageToAir` automation command, before the page in question has actually completed preparation and has been taken to air. The Wait for take to occur before returning from 'TakePageToAir' command check box is cleared by default to enable this behavior.

In some situations e.g. when a Clarity system in being controlled by a Harris automation system, it may be desirable for the Clarity system to wait for the page in question to be taken to air before responding. Check the Wait for take to occur before returning from 'TakePageToAir' command box to enable this functionality.

9.71.3   Caching dialog tab

To configure software caching, follow the steps below:

- Select the Caching dialog tab on the <u>Local Preferences dialog box</u> 696. The Caching dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
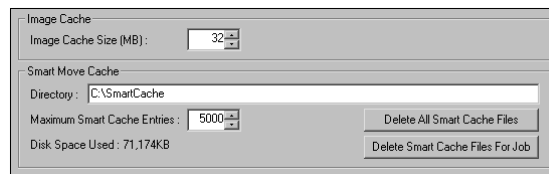
9.71.3.1   Image Cache group box

The Image Cache Size (MB) increment box enables the configuration of the image cache size in Mbytes. The image cache, once full, takes up a proportion of the total system RAM that is allocated by the software for the storage of logos, logo fonts and picture cutouts.

When a job is loaded and individual pages are edited or played out, the cache is gradually filled with page elements until the limit is reached. After the limit is reached, the first elements are replaced with new cached elements.

Subsequent editing or playout preparation of pages containing elements that are cached will be much faster due to the page elements being quickly accessible by the system.

Increasing the image cache reduces the amount of system RAM available to other applications/processes as the cache grows to its maximum limit.

To increase the maximum size of the image cache, type in the required value in Mbytes in the Image Cache Size (MB) increment box or use the increment and decrement buttons to jog the value up or down.

NOTE

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

If you are working on a job containing a large number of logos, logo fonts or picture cutouts, it may beneficial to increase the size of the image cache to increase the number of elements that can be stored at any one time.

9.71.3.2   Smart Cache group box

When you attempt to go on-line after inserting a new Smart Move [532] animation marker or after re-configuring an existing Smart Move animation marker, it will detect that they need rendering and will then start rendering.

When Smart Moves are rendered, they are saved directly to disk and will stay there until they are needed i.e. they do not need to be re-rendered each time the job is loaded. The rendered Smart Moves are saved by default to the local hard disk on the Clarity system unit or the PC running Clarity PREP in the following folder:

C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Smart Cache

Obviously, smart cache files can become quite large, both in terms of memory and number, thus taking up a significant amount of disk space. If desired, these files can be deleted if they are no longer required.

Although cached Smart Moves can be manually removed to free up disk space, it is generally easier and quicker to use the controls on the Caching dialog tab.

- To configure a new Smart Cache location, edit the file path in the Directory text box.
- To specify the maximum number of smart cache files permitted, type in the required value in the Maximum Smart Cache Entries increment box or use the increment and decrement buttons to jog the value up or down. When this limit is reached, Smart Cache files that are deemed to have been used first (i.e. the oldest files) are automatically deleted.
- To delete all Smart Cache files created in previous software sessions, select the Delete All Smart Cache Files button.
- To delete Smart Cache files for the current job, select the Delete All Smart Cache Files For Job button.

9.71.4   Clip Store dialog tab [CLARITY]

The management and configuration of the Clarity internal storage AND external clip storage solutions is achieved by using the Clip Store dialog tab on the Local Preferences dialog box [696].

To configure clip stores, follow the steps below:

- Select the Clip Store dialog tab on the Local Preferences dialog box [696]. The Clip Store dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   708

Copyright © 2000-2006 Pixel Power Ltd.
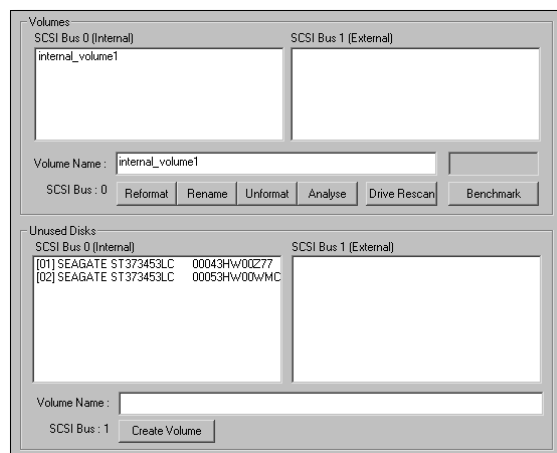
9.71.4.1 Unused Disks group box

Unused disk sets that have been identified by the system but from which volumes have yet to be created 709ˆ, are displayed in the Unused Disks group box. If it is an internal volume set, it will be shown in the SCSI Bus 0 list box; external storage volume sets connected via the external SCSI 1 bus will be shown in the SCSI Bus 1 list box.

NOTE

Once an volume has been named and created from an unused disk set, it will appear in the respective SCSI 1 or SCS0 list box in the Volumes group box.

9.71.4.1.1 Create Volume button

You can create a new volume from the internal clip storage volume set or from an external storage volume set. After selecting the desired unused disk set from the SCSI 0 or SCSI list box in the Unused Disks 709ˆ group box, select the Create Volume button.

9.71.4.1.2 SCSI BUS 0 and 1 list boxes

Internal volume sets and external storage volume sets connected via the external SCSI 1 bus will be shown in the SCSI Bus 0 list box.

9.71.4.1.3 Volume Name text box

`<volume name>`

Before creating 709ˆ a volume, enter the desired name for a volume set in the Volume Name text box.

NOTE

There is a limit of 32 characters.

9.71.4.2 Volumes group box

The volumes group box enables a number of actions to be performed on existing volumes listed in the SCSI 0 and SCSI 1 list boxes 710ˆ.

You can reformat 710ˆ, rename 710ˆ (only volumes that appear in the SCSI 0 list box can be renamed), unformat 710ˆ (remove boot sector), analyse 709ˆ (to produce an operational status log subsequent reference) and re-scan 710ˆ (to refresh the selected SCSI bus to show new or deleted volumes).

9.71.4.2.1 Analyse button

You can analyse a volume to check its operational status. A status log is produced for subsequent reference. After selecting the desired volume from the Volumes group box, select the Analyse button. The Analyse Volume Results 565ˆ dialog box is displayed.

At the same time, a .TXT log file is written to the `Hardware` folder in your chosen CG Tools installation folder on the local hard disk. The filename has the same name as the volume you have analysed, but is prefixed with `DiskLog_` e.g. `DiskLog_internal_volume1.txt`.

NOTE

Pixel Power support 103ˆ may request this status log if you are experiencing problems with the volume.

9.71.4.2.2 Benchmark button

You can test a selected volumes' disk read performance in megabytes per second (MB/s). After selecting the desired volume from the Volumes group box, select the Benchmark button.

9.71.4.2.3   Drive Rescan button

You can manually re-initialise the SCSI drive system. It should be used in situations where a new external storage volume set has been added or removed. You do not have to select a volume; select the Drive Rescan button to perform a rescan.

A status message appears asking if you want to rescan.

NOTE

This is the same operation that is conducted automatically when a system unit is started or re-booted.

9.71.4.2.4   Reformat button

You can format a new volume or re-format an existing volume, removing all clip data. After selecting the desired volume from the Volumes group box, select the Re-Format button.

NOTE

If re-formatting an existing volume, ensure that any desirable clip material is archived before starting the formatting process. Once formatted, previous clip data is NOT recoverable as it is deleted from the volume.

9.71.4.2.5   Rename button

You can rename an existing internal (SCSI 0) volume 710. After selecting the desired volume from the SCSI 0 list box in the Volumes group box, select the Re-Name button.

NOTE

If you are renaming an existing internal volume on the host system unit that is being used as a remote clip store by another client Clarity system unit within you workgroup/network, the remote clip store will have to be reassigned on the client after the internal volume has been renamed.

9.71.4.2.6   SCSI BUS 0 and 1 list boxes

If it is an internal volume set, it will be shown in the SCSI Bus 0 list box; external storage volume sets connected via the external SCSI 1 bus will be shown in the SCSI Bus 1 list box.

9.71.4.2.7   Unformat button

You can un-format an existing formatted volume by deleting the volumes' boot sector. After selecting the desired volume from the Volumes group box, select the Unformat button.

NOTE

Ensure that any desirable clip material is archived before starting the formatting process. Once un-formatted, all previous clip data will become un-accessible.

9.71.4.2.8   Volume Name text box

```
<volume name>
```

Before renaming 710 a volume, enter the desired name for a volume set in the Volume Name text box.

NOTE

There is a limit of 32 characters.

9.71.5   Clip Store Emulation dialog tab

Enables you to specify a path that the current system will use to mimic a clip drive and whether missing clips are retrieved. Also enables configuration of how clips that are being transferred by the job copy mechanism are accepted by the host system and how the host system will react when loading a job that was previously copied to a PC file system (along with any associated .PPV files).

To configure clip store emulation, follow the steps below:

- Select the Clip Store Emulation dialog tab on the Local Preferences dialog box 696. The Clip Store Emulation dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
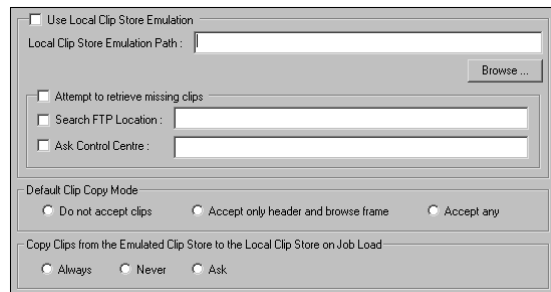

SEE ALSO

Emulated clip stores 450

9.71.5.1 Use Local Clip Store Emulation check box

Check the Use Local Clip Store Emulation box to turn on local clip store emulation for the current system.

9.71.5.1.1 Local Clip Store Emulation Path text box and Browse button

Enter the file path in the Local Clip Store Emulation Path text box of the folder on the local system that you want to use as the emulated clip store or select the Browse button.

After selecting Browse, the Browse for Folder dialog box is displayed.
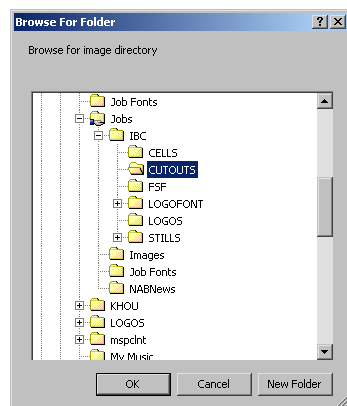
Browse to the folder that you want to use as the emulated clip store, then select OK to revert back to the User Preferences dialog box 809.

9.71.5.1.2 Attempt to retrieve missing clips group box

To specify that the local copy of Clarity PREP on the machine running the Pixel Power Control Centre (PPCC) should attempt to retrieve missing clips, check the Attempt to retrieve missing clips check box.

Search FTP Location check box and text box

Check the Search FTP Location box to search for missing clips in the FTP location specified in the adjacent text box.

Ask Control Centre check box and text box

Check the Ask Control Centre box to ask the PPCC running on the machine specified in the adjacent text box (set to localhost by default) for the location of missing clips.

9.71.5.2   Default Clip Copy Mode group box

The controls in the Default Clip Copy Mode group box enable you to indicate how, if at all, clips are to be copied to current machine during the job copy process. You can select that clips are not accepted 712ᐟ, only header and browse frames 712ᐟ are accepted or any files 712ᐟ are accepted.

9.71.5.2.1   Do not accept clips radio button

Select the Do not accept clips option to stop clip files being copied to a physical clip store OR configured emulated clip store when jobs featuring associated clips are copied to the local machine.

9.71.5.2.2   Accept only header and browse frame radio button

Select the Accept only header and browse frame option to create a small .PPV file that contains just the clip header information and the selected browse frame on the configured emulated clip store when jobs featuring associated clips are copied to the local machine.

9.71.5.2.3   Accept any radio button

Select the Accept any option to create a full (large) .PPV file on the physical clip store OR configured emulated clip store when jobs featuring associated clips are copied to the local machine.

9.71.5.3   Copy clips from the Emulated Clip Store to the Local Clip Store on Job Load group box

The controls in the Copy clips from the Emulated Clip Store to the Local Clip Store on Job Load group box enable the configuration of how the host system will react when loading a job that was previously copied to a PC file system along with any associated .PPV files. You can select that clips are always 712ᐟ copied from the emulated clip store to the local physical clip store, never 712ᐟ copied or you can select that a message box is displayed every time this situation is encountered 712ᐟ.

9.71.5.3.1   Always radio button

Select the Always option to always copy clips from the emulated clip store to the local physical clip store.

9.71.5.3.2   Never radio button

Select the Never option to never copy clips from the emulated clip store to the local physical clip store.

9.71.5.3.3   Ask radio button

Select the Ask option to enable the software to display a message every time this situation is encountered, thus enabling a decision to be made for every instance.

9.71.6   FTP Server dialog tab

The FTP Server dialog tab on the <u>User Preferences dialog box</u> [809] enables the configuration of the local Clarity FTP server. To configure local Clarity FTP server options, follow the step below:

• Select the FTP Server dialog tab on the <u>Local Preferences dialog box</u> [696]. The FTP dialog tab is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
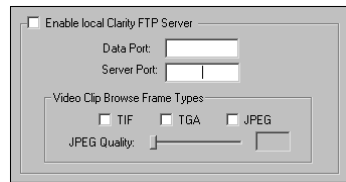
9.71.6.1   Enable local Clarity FTP Server check box

To enable the current Clarity system unit to act as an FTP server, ensure that the Enable local Clarity FTP Server box is checked.

9.71.6.2   Server Port Number and Data Port text boxes

FTP is a TCP based service exclusively. There is no UDP component to FTP. FTP is an unusual service in that it utilizes two ports, a 'data' port and a 'command' port (also known as the control port). Traditionally these are port 21 for the command port and port 20 for the data port. The confusion begins however, when we find that depending on the mode (Active or Passive), the data port is not always on port 20.

To configure a new server (command port) and data port, edit the port numbers in the Server Port Number and Data Port Number text boxes.

9.71.6.3   Video Clip Browse Frame Types group box

When .PPV file are transferred via the FTP sever, you can configure the browse frame image types to be created on the FTP Server Port and the quality of JPEG images if required.

JPEG check box

Check the JPEG box to enable the creation of browse image frames in the JPEG (.JPG) format.

JPEG Quality slider bar and increment box

If you selected to create JPEG browse image frames, you can also configure the image quality of these image files using the JPEG Quality slider bar.

TGA check box

Check the TGA box to enable the creation of browse image frames in the TARGA (.TGA) format.

TIF check box

Check the TIF box to enable the creation of browse image frames in the TIF (.TIF) format;

9.71.7   General dialog tab

To configure general software options, follow the steps below:

- Select the General dialog tab on the <u>Local Preferences dialog box</u> 696. The General dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
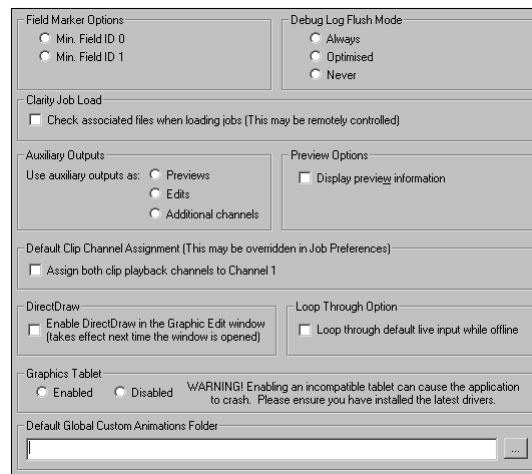
9.71.7.1   Auxiliary Ouputs group box [CLARITY]

Enables configuration of whether <u>previews of pages show all page elements</u> 714 and the <u>behaviour of available auxiliary outputs</u> 714.

9.71.7.1.1   Display Page Preview Image check box

Normally, a preview for the currently prepared page is displayed whilst online, previewing the page in its starting state i.e the page may be blank due to animations being set to start off-screen. To display previews of pages as they are shown in the <u>Page Browser</u> 251 instead, showing all page elements, ensure that the Display Page Preview Image box is checked.

9.71.7.1.2   Previews, Edits and Additional Channels radio buttons

By default, available auxiliary outputs (AUX VID A/B and KEY A/B) available with your system are set to preview the associated channels' video (VID) and key output (KEY). This behaviour can be changed if desired.

Option	Behaviour
Previews	The available auxiliary outputs (AUX VID A/B and KEY A/B) available with your system will preview the associated channels' video (VID) and key output (KEY).
Edits	The available auxiliary outputs (AUX VID A/B and KEY A/B) available with your system will preview edits to pages before going online.
Additional Channels	If you have purchased the additional output channel option for your system (see below), the available auxiliary outputs (AUX VID A/B and KEY A/B) available with your system feature as additional playout channels when online.

NOTE

The Additional Channels option above requires either:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not

supported on this channel) (Clarity 200 and 300 systems only) (requires Video clip and auxiliary output option).

9.71.7.2 Clarity Job Load group box

Enables configuration of job load options including <u>associated file checking</u> 715 .

9.71.7.2.1 Check Associated Files When Loading Jobs check box

To ensure that the validity of associated files are check when a job is loaded, check Check Associated Files When Loading Jobs box.

9.71.7.3 Debug Log Flush Mode group box

Enables the control of how the debug logging is flushed to disk including <u>Always</u> 715 , <u>Optimised</u> 715 or <u>Never</u> 715 . Improves the speed of reaction to the Take command. Previous non-dynamic flushing added a long delay to Take commands.

9.71.7.3.1 Always radio button

Select the Always option to flush at every log comment write, potentially slowing potentially slowing take commands.

9.71.7.3.2 Optimised radio button

Select the Optimised option to stop debug log flushing during takes.

9.71.7.3.3 Never radio button

Select the Never option to ensure that flushing is controlled automatically by Windows. More efficient in terms of resource use but logging may not always be up-to-date when you need it.

9.71.7.4 Default Clip Channel Assignment group box [CLARITY]

Enables <u>association of internal clip playback channels</u> 715 with a selected channel.

9.71.7.4.1 Assign both clip playback channels to channel 1

On dual SD channel systems, by default, the system is configured to play one clip per channel. This is to conform with the predicted default use of having one clip per page (either as a background or as a pasted clip in the foreground).

In situations where:

- two clips are required per page (usually by having two pasted video clips in the foreground of a single page);
- you want <u>page transition animations</u> 440 (e.g. reveal) between pages containing background video clip on channel 1 to render correctly during playout;

you can apply both clip playback channels to channel 1. With this setting turned on, channel 2 cannot be used as a video clip playback channel whilst playing an jobs that are loaded.

To enable this functionality, ensure that the Assign both clip playback channels to Channel 1 box is checked.

NOTE

If you use this functionality only on selective jobs and not by default, leave the box unchecked and check the matching <u>Assign both clip playback channels to channel 1 check box</u> 680 in the on the <u>General dialog tab</u> 680 of the <u>Job Preferences dialog box</u> 679 .

715   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.71.7.5 Default Global Custom Animations Folder group box

In CG Tools versions 7.1.0.6 and later, when a job is loaded, the software now checks for the presence of a `Custom Animation` folder beneath the folder where the job file is located e.g. `C:\MyJobs\MyCustomJob\Custom Animations`.

Because the CG Tools software defaults to looking for older custom animations in the `CG Tools 7.1\Custom Animations` folder, if you are upgrading from a CG Tools 7.0 version installation to CG Tools version 7.1.0.6 or later, when jobs saved in a previous version that reference custom animations are loaded, they will not look for the referenced files in the correct location.

To counter this, you can either:

a)   copy all custom animation files from a previous CG Tools installation (e.g. `CG Tools 7.0\Custom Animations`) or to enable minimum disruption;
b)   you can change on a per job basis the default location where the software looks for custom animations.

The file path specified using the text box and browse button 716 is then used to fill the Global Custom Animations Folder text box 682 on the General dialog tab 680 on the Job Preferences dialog box 679. For each job saved in a previous version that is subsequently loaded, if you then check the Automatically Copy New Custom Animations From Global Folder check box 683 on the General dialog tab 680 on the Job Preferences dialog box 679, when the jobs is re-saved, the CG Tools software will copy all of the custom animations used by the job from the location defined using the Default Global Custom Animations Folder group box to a `Custom Animation` folder beneath the folder where the job file is located e.g. `C:\MyJobs\MyCustomJob\Custom Animations`.

This ensures that old jobs continue to work without any additional configuration by the user.

SEE ALSO

Changes to Custom Animation implementation for CG Tools version 7.1.0.6 465

9.71.7.5.1 Text box and Browse button

Enter a new folder path using the text box or select the adjacent Browse button. If the Browse button is selected, the Browse for Folder dialog box is displayed where you can select a new location that will contain default global custom animations.
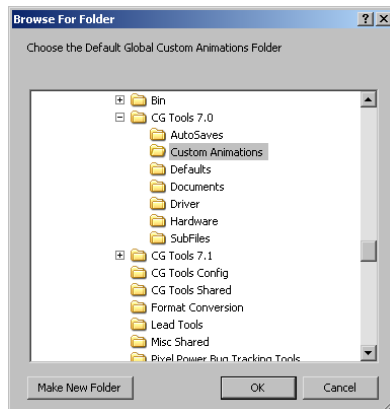
9.71.7.6 DirectDraw group box

Enables configuration of Microsoft™ DirectDraw® system settings.

DirectDraw® provides a device-independent way for games and Windows subsystem software, such as three-dimensional (3-D) graphics packages and digital video codecs, to gain access to the features of specific display devices.

9.71.7.6.1   Enable DirectDraw in the Graphic Edit window check box

By default, the CG Tools software is configured to use the Microsoft™ DirectDraw® system to display and render graphics within the user interface. This provides a useful improvement in response and update speed on Clarity systems that feature high specification third party graphics display adapters (Clarity 500, Clarity 300 and PC's running Clarity PREP). When editing graphics and text on Clarity 100 or 200 systems, you may experience the slow update of the display within the Graphic Edit window ²⁶⁰ due to the graphics hardware of Clarity 100 and 200 systems being unable to support DirectDraw® API calls fully.

To improve the update/response speed, you can set the software not to use DirectDraw® feature set to render graphics within the user interface.

To ensure that the DirectDraw system is NOT used to render graphics within the user interface, clear the Enable DirectDraw in the Graphic Edit window check box.

NOTE

For more information on DirectDraw, refer to http://msdn.microsoft.com/archive/default.asp?url=/archive/en-us/ddraw7/directdraw7/ddover_5ak7.asp.

9.71.7.7   Field Marker Options group box

Enables configuration of field marker options, including the number at which field markers ID's commence ⁷¹⁷.

9.71.7.7.1   Minimum Field ID radio buttons

This option is only available for configuration when no job is currently open.

By default, all Pixel Power broadcast products number text fields from 1. When operating Clarity under the control of an automation system, it may be required that text field numbering commences from 0 instead of 1. For example, this maybe because other broadcast equipment controlled by the same automation system creates fields commencing at 0.

To configure the convention for text field numbering, select either Minimum Field ID 0 or Minimum Field ID 1.

9.71.7.8   Graphics Tablet group box

To ensure correct operation of the CG Tools software with a Wacom graphics tablet, you must ensure that the latest drivers available for you tablet derivative have been installed (at least Wacom drivers version 4.52 or later). This should be the case if you are using the graphics tablet supplied with a Clarity system unit. In instances where you are using a tablet connected to PC running the Clarity PREP software derivative, the latest drivers may not be installed.

If the latest drivers have not been installed, the software will encounter problems when the tablet is used for the first time after the software has started. This may result in software failure.

By default, the software is configured to use a connected graphics tablet. To disable use of a connected Wacom graphics tablet, select Disable.

NOTE

The setting is not used until the software is re-started.

9.71.7.9   Loop Through Option group box [CLARITY]

Enables configuration of video loop through options.

9.71.7.9.1   Loop through default live input while offline check box

To ensure that the video supplied by the default live input is looped through and displayed by the system whilst it is offline, check the Loop through default live input while offline check box.

NOTE

The default live input is configured using the Default Live Source drop-down list box ⁷⁹¹ on the Chan A/B dialog tab

717   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

790 on the SD Hardware Configuration dialog box 786.

9.71.7.10   Preview Options

Enables configuration of whether page information 718 is shown in previews 350.

9.71.7.10.1   Display preview information check box

This option is only available for configuration when no job is currently open.

To display preview information (name, video format etc.) for the currently prepared page whilst online, below the page preview for the selected channel, ensure that the Display preview information box is checked.

9.71.8   GPI Triggers dialog tab [CLARITY]

Where relevant, you can configure the GPI's available with your system to trigger animations. This is achieved by mapping GPI's to keys on the keyboard so that they mimic keypresses when the GPI's are active. To GPI triggering, follow the step below:

•   Select the GPI Triggers dialog tab on the Local Preferences dialog box 696. The GPI Triggers dialog tab is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
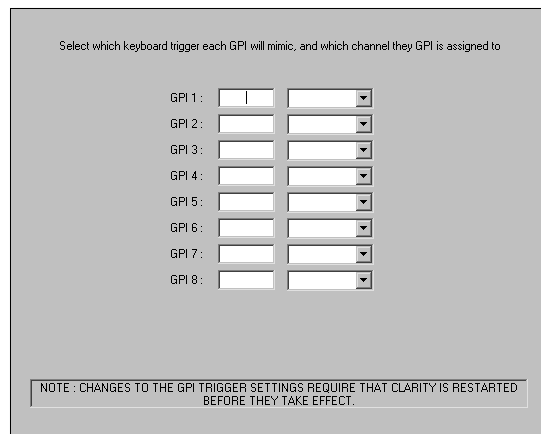
9.71.8.1   GPI <n> text boxes and drop-down list boxes

For the desired GPI, enter the key in the related GPI <n> text box that you want to activate when the GPI is active. From the adjacent drop-down list box, select the desired channel to which the GPI is assigned to.

NOTE

Changes to the GPI trigger settings require that the Clarity system is restarted before the settings take effect.

9.71.9   Keyboard dialog tab

To configure keyboard options, follow the step below:

•   Select the Keyboard dialog tab on the Local Preferences dialog box 696. The Keyboard dialog tab is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
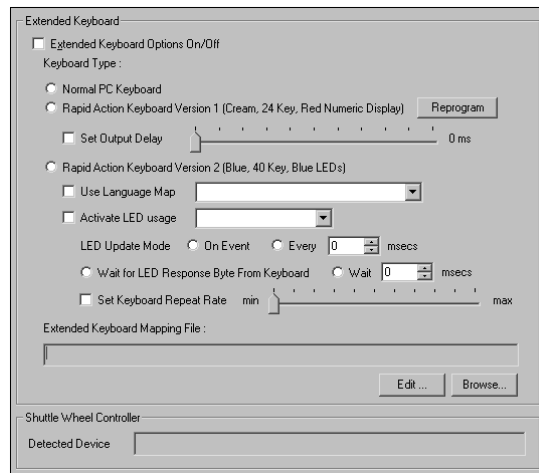
SEE ALSO

Extended Keyboard group box [719]
Extended Keyboard Options On/Off check box [719]
Extended Keyboard Mapping File box, Edit and Browse button [719]
Keyboard Type and specific keyboard options [720]
Keyboards [177]

9.71.9.1 Extended Keyboard group box

After ensuring that the Extended Keyboard Options On/Off box [719] is checked, the controls in the Extended Keyboard group box enable the selection of the connected keyboard type and configuration of related options [720] for each specific keyboard type. It also enables a specific extended keyboard mapping [719] file to be selected.

9.71.9.1.1 Extended Keyboard Options On/Off check box

To specify that extended keyboard options are available for use by the connected keyboard, follow the step below:

- Ensure that the Extended Keyboard Options On/Off is checked.

The options within the Extended Keyboard group box are enabled.

9.71.9.1.2 Extended Keyboard Mapping File box, Edit and Browse button

Supported RapidAction keyboards have their key presses interpreted by a special file with an .EKM file extension. On occasions, you may need to change the extended keyboard file used by the software to map keyboard shortcuts to specific software functions. This will be the case when changing languages or changing between a Version 1 [179] and Version 2 [183] RapidAction keyboard. For more information on .EKM files and guidance in selecting the correct file, see RapidAction keyboard mapping files (.EKM) [178].

To change the extended keyboard file, follow the steps below:

- Select Browse and navigate to a location where the .EKM file is saved, then select OK to return to the User Preferences dialog box [809].

The selected extended keyboard file (.EKM) can be edited if desired. It is recommend that extended keyboard files are only edited on specific request by Pixel Power support staff as keyboard operating problems can occur if the file is not edited in the correct manner. To edit the selected extended keyboard file (.EKM) shown in the Extended Keyboard File text box, follow the steps below:

- Select Edit. The Extended Keyboard Map dialog box [639] is displayed.
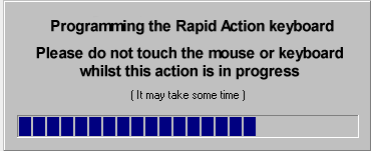
NOTE

Please contact Pixel Power technical support [103] for more information on editing an extended keyboard map.

9.71.9.1.3   Keyboard Type and specific keyboard options

With the Extended Keyboard Options On/Off box checked ⌐719⌐, you must select the type of keyboard that you are using. With an option selected, you can then configure any options that are relevant to your selection. After selecting an option, the following message box is displayed, reminding you that you must select the correct keyboard mapping file ⌐719⌐ before continuing.

Option	Description
	Configuration Option
Normal PC Keyboard	You are using the Standard keyboard ⌐178⌐, supplied as standard with Clarity 100.
RapidAction Keyboard Version 1 (Cream, 24 Key, Red Numeric Display)	You are using the Version 1 RapidAction keyboard ⌐179⌐, previously supplied as standard with 5U Clarity systems and Clarity 200/300 systems (optional for Clarity 100 systems and offline software derivatives e.g. Clarity PREP). It provides a variety of dedicated keys (24) to give fast access to commonly used character generator functions.
	Set Output Delay check box and slider — When using a Version 1 RapidAction keyboard ⌐179⌐ in conjunction with a KVM extender, you may need to adjust the amount of delay in milliseconds between each keypress that is interpreted between the CG Tools software and the connected keyboard. For example, some KVM extenders may have difficulty interpreting compounded keyboard shortcuts (e.g. CTRL+ALT+G etc.) due to there not being enough time between each keypress.
	Reprogram button — If you experience any operating anomalies (incorrect RapidAction key functions etc.), when using a Version 1 RapidAction keyboard ⌐179⌐, you can re-program the keyboard to return it to its default state, based on the selected extended keyboard file ⌐719⌐. Follow the step below: • Select Reprogram RapidAction Keyboard. A dialog box appears displaying the progress of re-programming. It is recommended that you do not try to use the keyboard, graphics tablet or mouse whilst the keyboard is being re-programmed. All of the KVM extenders that we have tried with RapidAction keyboards ⌐177⌐ block the keyboard programming commands. This means that the keyboard must be plugged directly into the Clarity system unit or PC running the Clarity PREP software in order for this operation to be successful.

Option	Description		
	Configuration Option		
RapidAction Keyboard Version 2 (Blue, 40 Key, Blue LEDs)	You are using the Version 2 RapidAction keyboard [183], currently supplied as standard with 5U Clarity systems and Clarity 200/300 (optional for Clarity 100 systems and offline software derivatives e.g. Clarity PREP). It provides a larger number of dedicated keys (40) compared to the Version 1 RapidAction keyboard. The Version 2 RapidAction keyboard also features some illuminated keys to help inform the operator of the current state of the system, software and playout status.		
	Use Language Map check box and drop-down list box	Currently, only the Hungarian language requires a language map. Select Hungarian if you are using a keyboard with a Hungarian key set.	
	Activate LED usage radio button	To utilise the Active LED's on the keyboard, ensure that this option is selected. This option is turned on by default. This setting CAN be turned off in situations where you are experiencing problems when using a KVM switch/extender, but the LED Update Mode and Set Keyboard Repeat Rate settings may resolve any problems. Use the drop-down list box to select your current circumstances.	
		Drop-down list box	LED usage can be selected based a set of circumstances. Select Direct connection if you have connected the keyboard directly to the system unit, KVM Extender if you have connected the keyboard via an extender, KVM Switch if you have connected the keyboard via a switch. To configure the LED usage, manually, select the Custom option to enable the options below.
		LED Update Mode	*On Event radio button* This setting provides the most efficient way of updating LED's and should be used in situations where you have a single keyboard controlling a single system (i.e. no KVM switch/extender).
			Every radio button and increment box When accessing multiple systems from a single Version 2 RapidAction keyboard [183] using a KVM switch/extender, after switching to control a different system, the keyboard LED's will not reflect the system state if the On Event option is selected. Select the Every option in this circumstance and adjust the interval between LED update signals using the adjacent increment box.
		Wait for LED Response Byte From Keyboard radio button	LED operation is controlled by the communication of bytes between Version 2 RapidAction keyboards [183] and the CG Tools software. In situations where the keyboard is connected via a KVM Switch or KVM Extender, it may be necessary to select this option and increase the response/wait time to ensure that response bytes are communicated fully through the extender or switch between the keyboard and CG Tools software. If the keyboard is connected directly, then you can optionally configure a reduced response/wait time to improve LED responsiveness, although improvements are not guaranteed.
			Wait increment box Optionally configure a new byte response wait time in milliseconds.
		Set Keyboard Repeat Rate check box and slider	When accessing multiple systems from a single Version 2 RapidAction keyboard [183] using a KVM switch/extender, the repeat rate may be reset to the lowest value when switching between devices. This causes problems as the keyboards' active LED functionality is controlled using a specific key rate. This setting is designed overcome this limitation, ensuring that the required keypress repeat rate is always sent before each active LED update call. This setting overrides the MS Windows keyboard repeat rate setting.

9.71.9.2 Shuttle Wheel Controller group box

The Shuttle Wheel Controller group box displays information regarding the connected Contour Designs USB Shuttle device.

SEE ALSO

Detected Device status box |722⟩
Contour Designs ShuttlePRO and Shuttle Xpress USB multimedia controller support |455⟩
http://www.contourdesign.com/shuttlepro/)

9.71.9.2.1 Detected Device status box

Displays the device name of the connected Contour Designs USB Shuttle device.

9.71.10 Local QuickLoads dialog tab

The definition and configuration of settings enabling jobs to be loaded quickly is achieved using the Local Quickloads dialog tab. QuickLoads enable a system administrator to associate workgroup jobs (templates etc.) to designated shortcut key combinations on the local system that users will access regularly. QuickLoads that are active for the current system also appear in the File> |378⟩ QuickLoads>Local QuickLoads |383⟩ menu.

QuickLoads that are configured and made active using the Local QuickLoads dialog tab can be overridden by individual users using the User QuickLoads dialog tab |821⟩ on the User Preferences dialog box |809⟩. In situations where this occurs, the following message is displayed at the bottom of the dialog tab when a QuickLoad is selected:

```
Note: This QuickLoad is currently overloaded by user QuickLoad <name>
```

To define and configure QuickLoads for the current local system, follow the step below:

- Select the Local QuickLoads dialog tab on the Local Preferences dialog box |696⟩. The Local QuickLoads dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
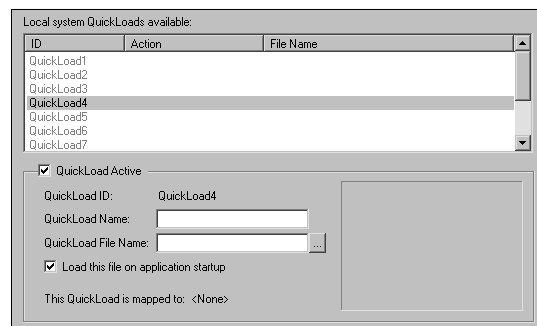
SEE ALSO

QuickLoads |175⟩
File> |378⟩ QuickLoads>Local QuickLoads |383⟩

9.71.10.1 Local system QuickLoads available list box

Lists the available QuickLoads for the current local system. Select a QuickLoad from the list available and then edit the settings using the controls in the QuickLoad Active group box 723.

Column	Description
ID	Displays the ID of the QuickLoad. QuickLoad files have ID's 1 through to 10. These correspond to the ten extended key actions that relate to the ten QuickLoads (`PPQuickLoad 1` through to `PPQuickLoad 10`).
Action	Corresponds to the string entered using the QuickLoad Name text box 723. Provides a description of the job that the QuickLoad will load when actioned.
Filename	Filename of the job to be actioned (specified using the QuickLoad File Name text box and browse button 723).

NOTE

The list of available QuickLoads may feature an entry highlighted in red. This indicates that the QuickLoad has been set to action when the CG Tools software is started. This is set using the Load this file on application start-up check box 723.

9.71.10.2 QuickLoad Active check box and group box

Check the QuickLoad Active check box to set the QuickLoad selected in the Local system QuickLoads available list box 723 to active. You can subsequently configure the job that will be loaded when the QuickLoad is actioned 723, enter a description of the QuickLoad 723 (i.e describe the job that will be loaded) and also configure that the selected QuickLoad will be actioned automatically 723 when the CG Tools software is started. This group box also displays the key combination 724 associated with the selected QuickLoad (if configured).

9.71.10.2.1 Load this file on application startup check box

To ensure that the job associated with the current QuickLoad is loaded automatically when the CG Tools software is started, ensure that the Load this file on application startup box is checked. The selected QuickLoad in the list is highlighted red.

9.71.10.2.2 Preview window

Previews the selected job associated with the current QuickLoad.

9.71.10.2.3 QuickLoad File Name text box and browse button

Enter the file path in the QuickLoad File Name text box of the job file that you want to associate with the current QuickLoad or select the Browse button and browse for the desired location and job file. If the browse button is selected, the Open Job dialog box 750 appears where you can browse and select the desired job file.

9.71.10.2.4 QuickLoad ID

`<0-10>`

Displays the numeric identification of the QuickLoad selected within the Local system QuickLoads available list box 723 .

9.71.10.2.5 QuickLoad Name text box

Enter a descriptive message for the current QuickLoad using the QuickLoad Name text box. This information appears in the Action column in the Local system QuickLoads available list box 723.

723   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.71.10.2.6　This QuickLoad is mapped to <key combination>

Displays the key combination to which the selected QuickLoad is associated with. Key combinations can be associated with active QuickLoads by editing the current keyboard map using the Extended Key Editor dialog box |638⟩.

There are ten extended key actions that relate to the ten QuickLoads (`PPQuickLoad 1` through to `PPQuickLoad 10`).

SEE ALSO

9.71.11　Rack dialog tab (CLARITY)

System monitoring and related parameters can be configured using the Rack dialog tab.

To configure and view rack monitoring options and parameters, follow the step below:

- Select the Rack dialog tab on the Local Preferences dialog box |696⟩. The Rack dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

  This is the rack dialog tab for Clarity 500 systems:
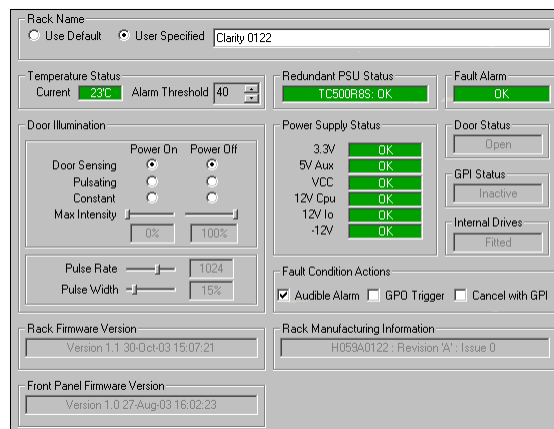
  This is the rack dialog tab for Clarity 100, 200, 3000 and 300 systems:
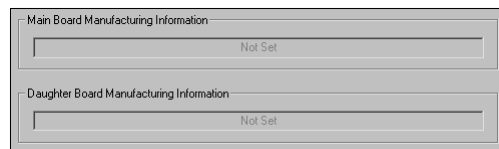
NOTE

- After selecting the Rack dialog tab, the software will initiate a connection with the system monitoring processor and then display the tab. If it is unable to initiate a connection, the dialog tab will remain blank stating:

  `Clarity Application is unable to detect the Rack System Management Processor`

9.71.11.1   Daughter Board Manufacturing Information status box

Clarity 100/200/300 system units may include the clip playback option in the form of the Standard Definition (SD) Clip Processing and Input/Output (I/O) (H098) PCB. This PCB plugs directly on to the H096 PCB. The manufacturing information for the Clarity 100/200/300 Standard Definition (SD) Clip Processing and Input/Output (I/O) (H098) PCB is shown in this status box. This is stored on a programmable IC located on the H098 PCB.

NOTES

- Please refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G) for more information on PCB's.
- Pixel Power support may request this information when dealing with support issues relating to the system.

9.71.11.2   Door Ilumination group box

Door illumination is provided by the array of LED's that follow the curvature of the display. Door illumination settings can be specified for both power-on and power-down events.

9.71.11.2.1   Constant radio buttons

Select these radio buttons to illuminate the LED's constantly.

9.71.11.2.2   Door Sensing radio buttons

Select these radio buttons to illuminate the LED's constantly, only when the system unit door is closed. No other options will have any effect.

9.71.11.2.3   Max Intensity sliders and text boxes

`(0-100%)`

Type the maximum intensity of the LED's in the range 0 to 100%, or use the sliders to change the value up or down.

9.71.11.2.4   Pulsating radio buttons

Select these radio buttons to illuminate the LED's using a pulsating effect.

9.71.11.2.5   Pulse Rate sliders and text boxes

`(n m/s)`

Only effective if the Pulsating option is selected. Enter the pulse rate (the time between each pulse), or use the sliders to change the value up or down.

9.71.11.2.6   Pulse Width sliders and text boxes

`(0-100%)`

Only effective if the Pulsating option is selected. Enter how long each pulse will illuminate for in the range 0 to 100% (a percentage of the Pulse Rate value), or use the sliders to change the value up or down.

9.71.11.3   Door Status status box

`(OPEN, CLOSED)`

The status of the system front panel is shown by the Door Status status box.

9.71.11.4   Fault Alarms status box

If for any reason, the system alarm sounds, visual confirmation will be shown by the Fault Alarm status box.

9.71.11.5   Fault Condition Actions group box

The controls in this group box enable selection of what notification events are to be actioned during fault conditions.

9.71.11.5.1   Audible Alarm check box

Check the Audible Alarm box to ensure that the audible system alarm is sounded during fault conditions. If the box is cleared, no alarm will be sounded.

9.71.11.5.2   Cancel with GPI check box

Check the Cancel with GPI box to enable a fault condition to be cancelled by an external GPI trigger to the Status Monitor GPI 9-pin standard density female D-type connector port on the rear panel.

9.71.11.5.3   GPO Trigger check box

Check the GPO Trigger box to send a trigger during a fault condition from the Status Monitor GPI 9-pin standard density female D-type connector port on the rear panel.

9.71.11.6   Front Panel Firmware Version status box

The firmware version of the front panel display is shown by the Front Panel Firmware Version status box. This is stored on a programmable IC located on the H093 Front Panel Display PCB.

NOTES

- Please refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G) for more information on PCB's.
- Pixel Power support may request this information when dealing with support issues relating to the system.

9.71.11.7   GPI Status status box

`(ACTIVE, INACTIVE)`

The status of the Status Monitor GPI 9-pin standard density female D-type connector port on the rear panel is shown by the GPI Status status box.

9.71.11.8   Internal Drives status box

`(FITTED, NOT FITTED)`

Whether internal clip storage drives are fitted to the system is shown by the Internal Drives status box.

9.71.11.9   Main Board Manufacturing Information status box

This status box displays manufacturing information for:

a)   the Clarity 100/200/300 main system PCB (H096 SD Framestore CPU and Input/Output (I/O) PCB);
b)   the Clarity 3000 main system PCB (H112 Standard Definition (SD) and High Definition (HD) Framestore CPU).

This information is stored on a programmable IC located on the relevant PCB.

NOTES

- Please refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G) for more information on PCB's.
- Pixel Power support may request this information when dealing with support issues relating to the system.

9.71.11.10   Power Supply Status group box

The controls in this group box display status information about all internal power rails within the system. If the relevant power rail is good, status will be green. In the event that the rail fails, the system alarm will sound, the relevant status box will turn red and a status message will also be shown on the front panel dot matrix display.

9.71.11.11   Rack Firmware Version status box

The firmware version of the system shown by the Rack Firmware Version status box. This is stored on a programmable IC located on the H092 and H108 Power Distribution PCB's.

NOTES

- Please refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G) for more information on PCB's.
- Pixel Power support may request this information when dealing with support issues relating to the system.

9.71.11.12   Rack Manufacturing Information status box

Manufacturing information, relating to the current system (serial number etc.), is shown by the Rack Manufacturing Information status box. This is stored on a programmable IC located on the H092 and H108 Power Distribution PCB's.

NOTES

- Please refer to the Clarity Installation, Operational Testing and Maintenance Manual (H059W003_Rev01_G) for more information on PCB's.
- Pixel Power support may request this information when dealing with support issues relating to the system.

9.71.11.13   Rack Name group box

The controls in this group box enable the selection of what is displayed on the system front panel dot matrix display during normal operation.

9.71.11.13.1   Use Default radio button

Select the Use Default option to display the default `CLARITY` message on the system front panel dot matrix display during normal operation.

9.71.11.13.2   User Specified radio button and associaited text box

`(rackname)`

Select the User Specified option and enter a message in the adjacent text box to display your own custom rack name on the system front panel dot matrix display during normal operation.

9.71.11.14   Redundant PSU Status status box

`((PSU MODEL)OK, (PSU MODULE (N) FAIL))`

If the system is fitted with the optional redundant power supply unit (PSU), this box indicates the status of the power supply and its PSU modules. If all is well, status is shown as `(PSU MODEL)OK`, where `PSU MODEL` is the model of the PSU e.g. TC500R8S.

If power to a module is cut, the module itself fails or the module is removed from its enclosure, the system alarm will sound and the Redundant PSU Status box will turn red and indicate which module is affected, using the syntax PSU MODULE (N) FAIL, where (N) is the module in question.

The following message will also be shown on the front panel dot matrix display:

```
PSU MODULE (n) FAIL
```

9.71.11.15   Temperature Status group box

If the temperature shown by the Current status box 728 is below that specified in the adjacent Alarm Threshold increment box 728, the Current status box will be green. In the event that the temperature rises above this threshold, the system alarm will sound, the Current status box will turn red and the following message will also be shown on the front panel dot matrix display:

```
OVERHEATING: TEMPERATURE AT (n) C
```

9.71.11.15.1   Alarm Threshold increment box

```
(n °C)
```

In the Alarm Threshold increment box, type the temperature threshold at which the system alarm will sound, or use the increment and decrement buttons to jog the value up or down.

9.71.11.15.2   Current status box

```
(n °C)
```

The current temperature in degrees celsius (°C) inside the system chassis is shown by the Current status box.

9.71.12   Ramcorder dialog tab

To configure Ramcorder options, follow the step below:

- Select the Ramcorder dialog tab on the Local Preferences dialog box 696. The Ramcorder dialog tab is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
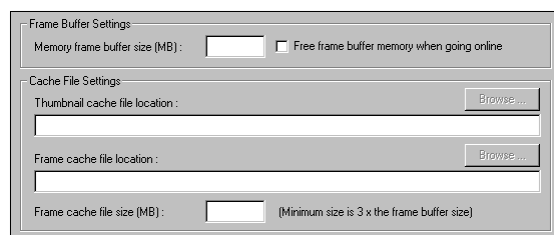
9.71.12.1   Cache File Settings group box

Enables configuration of frame cache file size 729, location 728 and thumbnail location 729.

9.71.12.1.1   Frame cache file location text box

```
<file path>
```

To change the location of the Memory Frame Cache, edit the file path in the Frame cache file location text box. Alternatively, select the adjacent Browse button to browse for and then select an existing file.

9.71.12.1.2 Frame cache file size text box

`(nnn mb)`

Edit the value in the Frame cache file size text box. This value should always be at least three times the size of the Memory Frame Buffer size value. The default value for the Memory Frame Cache is 192Mb.

A message may appear warning you that this is not the case after closing the Local Preferences dialog box [696]. If you select OK, the software will automatically append the Frame cache file size value to ensure that it is three times larger than the Memory frame buffer size value.

9.71.12.1.3 Thumbnail cache file location text box

`<file path>`

To change the location of the Thumbnail Cache file location, edit the file path in the Thumbnail cache file location text box. Alternatively, select the adjacent Browse button to browse for and then select an existing file.

9.71.12.2 Frame buffer settings group box

Enables the activation of automatic freeing of frame buffer memory [729] and the configuration of memory frame buffer size [729].

9.71.12.2.1 Free frame buffer memory when going online check box

If you regularly work on jobs that are RAM intensive (cel playout), check the Free frame buffer memory when going online box. This will enable Ramcorder frames to be paged out of physical memory, thus releasing physical memory for intensive online tasks such as the playout of cel animations. Ramcorder frames will not be lost but may take some time to appear after reverting back offline.

9.71.12.2.2 Memory frame buffer size (MB) text box

`(nnn mb)`

Edit the value in the Memory frame buffer size text box. The default value for the Memory Frame Buffer is 64 MB RAM which equates to an available 39 frames using the PAL 625 line video standard.

9.71.13 SNMP dialog tab

The functionality provided on the SNMP dialog tab only enables a Clarity system unit to act as an agent and to trap alerts from an explicit Hostname or IP address.

To configure SNMP options, follow the step below:

- Select the SNMP dialog tab on the Local Preferences dialog box [696]. The SNMP dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
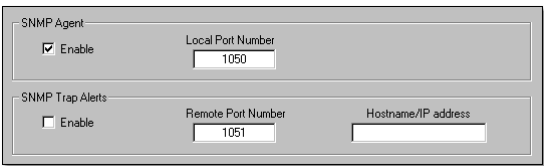
SEE ALSO

SNMP dialog tab [729]
SNMP Monitoring [538]

9.71.13.1 SNMP Agent group box

Enables control over whether the system unit acts a SNMP agent.

9.71.13.1.1 Enable check box

To enable a system to act as SNMP agent, ensure that the Enable box is checked in the SNMP Agent group box.

9.71.13.1.2 Local Port Number text box

`(nnnn)`

Enter the UDP port the agent (system) is communicating on.

9.71.13.2 SNMP Trap Alerts group box

Enables control over whether the system unit act traps SNMP alerts.

9.71.13.2.1 Enable check box

To enable Clarity to trap SNMP alerts, ensure that the Enable box is checked in the SNMP Trap Alerts group box.

9.71.13.2.2 Hostname/IP Address text box

`(nnn:nnn:nnn:nnn)`

Specify the Hostname or IP address of the Clarity system for which you want to trap alerts in the Hostname/IP Address text box.

9.71.13.2.3 Remote Port Number

Enter the UDP port the agent (system) is communicating on.

9.71.14 Still Store dialog tab

The configuration of still store settings is achieved using the Still Store dialog tab.

To configure still store settings, follow the step below:

- Select the Still Store dialog tab on the <u>Local Preferences dialog box</u> [696]. The Still Store dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
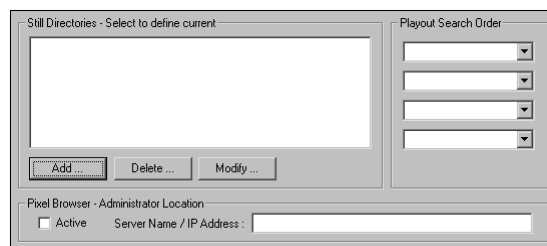
9.71.14.1 Pixel Browser - Administrator Location group box

If you are using the current system under automation, you can <u>select</u> [731] whether the current system updates a selected <u>Pixel Browser database</u> [731] with revised still directory location and contents information when new stills are saved.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   730

Copyright © 2000-2006 Pixel Power Ltd.

9. Dialog boxes

9.71.14.1.1 Active check box

To enable the current Clarity system unit communicate with a selected Pixel Browser Administrator, ensure that the Active box is checked.

9.71.14.1.2 Server Name / IP Address text box

Specify the location or IP address of the machine running the Pixel Browser software on your local area network software using the Server Name /IP Address text box. If the current machine is acting as the Pixel Browser host, enter `localhost` to specify this.

9.71.14.2 Playout Search Order group box

The four drop-down list boxes in this group box enable still store playout search order.

The playout search order is used when a number is entered using the numeric keypad whilst the system is online. This number is interpreted by the Playout Controls control box 343 and the software then searches for an entry using the search order defined. The search order that is defined can affect how quickly an entry is located and thus how quickly it can be put to air whilst online.

The following variables are available:

Variable	Description
Page/Stack Entry	Search Page List 252 and Page Stack (if available) for entry.
Still Cur Dir	Search the highlighted still directory in the List box 731.
All Still Dirs	Search all still directories in the List box 731.
None	None.

9.71.14.3 Still directories group box

Enables the selection 731, addition 731, modification 731 and deletion 731 of still store directories.

9.71.14.3.1 Add button

Select Add to a new still store directory. The Browse For Folder dialog box is displayed where you can select a new still store directory on the current system.

9.71.14.3.2 Delete button

Select Delete to delete the selected still store directory from the List box 731. There must be at least one store directory referenced in the List box and thus you will not be able to delete the last remaining directory.

9.71.14.3.3 List box

Lists the available current still directories for the current system. The highlighted directory is the current directory.

9.71.14.3.4 Modify button

Select Modify to select a new location for the selected still store directory in the List box 731. The Browse For Folder dialog box is displayed where you can select a new still store directory on the current system.

9.71.15 Timecode/VTR dialog tab [CLARITY]

The configuration of timecode and VTR settings is achieved using the Timecode/VTR dialog tab. It enables the configuration of devices currently being used in conjunction with the VTR ports available with the selected Clarity system unit. It also enables you to configure individual settings for each of the ports and how the available ports map to the number of channels currently available with your Clarity system unit.

To configure timecode and VTR settings, follow the steps below:

- Select the Timecode/VTR dialog tab on the Local Preferences dialog box ⌐696⌐. The Timecode/VTR dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

9.71.15.1 VTR Port Usage group box

```
(Easy Reader 1 (LTC), Easy Reader 2 (LTC), Easy Reader 3 (VITC), VTR Emulation, VTR
Control, DCF Receiver, Not Used)
```

The controls in the VTR Port Usage group box enable the selection of what device is attached to a selected VTR port on the Clarity system unit. Select the desired device for an available port using the VTR Port 1/2 drop-down list boxes.

The table below shows the VTR ports available for usage configuration:

Port	Clarity 500 rear panel connector	Clarity 100/200/300 rear panel connector
VTR Port 1	Channel A VTR (15-pin female D-type RS-232/RS422 serial VTR/machine control)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
VTR Port 2	Channel B VTR (15-pin female D-type RS-232/RS422 serial VTR/machine control)	N/A, no second channel available

Information regarding the pinouts of rear panel connectors featured in the table above are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

The table below shows the list of devices available for use by the available VTR ports:

Device	Description
Easy Reader 1 (LTC)	Select this option if you have connected an Easy Reader 1 supplying LTC timecode via the chosen VTR port.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   732

Copyright © 2000-2006 Pixel Power Ltd.

Device	Description
Easy Reader 2 (LTC)	Select this option if you have connected an Easy Reader 2 supplying LTC timecode via the chosen VTR port.
Easy Reader 3 (VITC)	Select this option if you have connected an Easy Reader 2 supplying VITC timecode via the chosen VTR port.
VTR Emulation	Select this option if you have connected a Edit Controller that will control the Clarity system unit as though it is a VTR (emulation).
VTR Control	Select this option if you have connected a VTR that will be controlled by the Clarity system unit.
DCF Receiver	Select this option if you have a DCF (German national radio clock) serial time source, which can then be used as a timecode source that clocks can synchronise to.
Not Used	Select this option if no device is connected to the chosen VTR port. This is the default setting for all system units.

9.71.15.2 VTR Emulation group box

Enables configuration of emulation settings in situations where VTR Emulation is selected for either port in the VTR Port Usage group box |732|.

9.71.15.2.1 Locate to first page when going online check box

If you are using an edit controller and have selected VTR Emulation for either port in the VTR Port Usage group box |732|, check the Locate to first page when going online box to override the current timecode, ensuring that it always starts shortly before the in-time of the first page.

9.71.15.2.2 VTR Emulation 1/2 Device ID text boxes

`(nnnn)`

These text boxes list the device ID that is requested on occasions by the connected edit controller, informing the controller of what type of device (VTR) the Clarity system unit is emulating. The default value is `2025` which corresponds to the *Sony BVW-75 Betacam SP*.

9.71.15.3 VTR Control group box

Enables configuration of control settings in situations where VTR Control is selected for either port in the VTR Port Usage group box |732|.

SEE ALSO

Recommended VTR control, grab and/or record settings |550|

9.71.15.3.1 Cue Mode drop-down list boxes

`(Auto, Fast Wind, Manual)`

The Cue Mode drop-down list enables the selection of the cueing mode for the selected VTR port. For the majority of modern digital VTR's, select Auto. If you are using an older analogue VTR with slower cueing abilities, select Fast Wind. This will enable the Clarity system to actively decide on the best Sony control protocol commands to send, thus ensuring the fastest possible cuing time.

9.71.15.3.2 Get Preroll text boxes

`(n frames)`

The Get Preroll text box displays the preroll time for getting frames from tape for the selected VTR and is measured in frames. It should be set according to the servo lock time of the connected VTR's tape transport. The default value is 125 frames.

9.71.15.3.3 Put Preroll text boxes

```
(n frames)
```

The Edit Preroll text box displays the preroll time for recording frames onto tape for the selected VTR and is measured in frames. It should be set according to the servo lock time of the connected VTR's tape transport. The default value is 125 frames.

9.71.15.3.4 TC Request Mode drop-down list boxes

```
(Auto, LTC, VITC)
```

The TC Request Mode drop-down list boxes enable the selection of the timecode standard that the connected VTR is operating under. Select either LTC of VITC if you are sure that the VTR is operating in either LTC or VITC request mode, or select Auto if you are unsure.

9.71.15.4 Channel Timecode Settings group box

Enables the configuration on timecode settings for playout channels available with the current Clarity system unit. You can configure the default timecode source [734], the use of drop frames [735], playback offset [735] and record offset/frame synchronisation/compensation delay values [736] for each available channel.

Channel	Description	Clarity 500	Clarity 100/200/300
Channel 1	Channel 1	■	■
Channel 2	Channel 2	■	
Channel A3*	Channel 1's auxiliary channel	■	■
Channel A4*	Channel 2's auxiliary channel	■	

NOTE*

Only available when using a Clarity system unit in conjunction with either of the following options:

- PP8391 - Additional two output channels (gives 4 channel machine, uses preview outputs, live input and clips not supported on these channels) (Clarity 500 systems only).
- PP8432 - Additional output channel (gives 2 channel machine, uses auxiliary output, live input and clips not supported on this channel) (Clarity 200 and 300 systems only) (requires Video clip and auxiliary output option).

9.71.15.4.1 Default Timecode Source drop-down list boxes

Select the desired default timecode source for an available channel using the Default Timecode Source drop-down list boxes. The table below shows the list of devices available:

Source	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
<Source selected for VTR Port 1> or No Source Selected	Source shown is that selected using the VTR Port 1 drop-down list box in the VTR Port Usage group box [732].	VTR (15-pin female D-type RS422 serial VTR/machine control)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
<Source selected for VTR Port 2> or No Source Selected	Source shown is that selected using the VTR Port 2 drop-down list box in the VTR Port Usage group box [732].	VTR (15-pin female D-type RS422 serial VTR/machine control)	N/A, no second channel available
LTC	SMPTE/EBU longitudinal timecode as read from the LTC pins on the relevant audio connector on the system rear panel.	AUDIO (15-pin female D-type digital audio port)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   734

Copyright © 2000-2006 Pixel Power Ltd.

Source	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
VITC from Analog REF Input	SMPTE/EBU vertical interval timecode read from the analogue reference input on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	REF (75BNC Analogue reference input)	REF (75BNC Analogue reference input)
VITC from Live A (V)	SMPTE/EBU vertical interval timecode read from Channel A's digital input video connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH A VID IN (BNC)	VID IN (BNC)
VITC from Live A (K)	SMPTE/EBU vertical interval timecode read from Channel A's digital input key connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH A KEY IN (BNC)	KEY IN (BNC)
VITC from Live B (V)	SMPTE/EBU vertical interval timecode read from Channel B's digital input video connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH B VID IN (BNC)	N/A, no second channel available
VITC from Live B (K)	SMPTE/EBU vertical interval timecode read from Channel B's digital input key connector on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	CH B KEY IN (BNC)	N/A, no second channel available
Embedded TC from Live A (V)	*Not yet supported by Clarity.*	N/A	N/A
Embedded TC from Live B (V)	*Not yet supported by Clarity.*	N/A	N/A

Information regarding the pinouts of rear panel connectors featured in the table above are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

9.71.15.4.2 Drop Frame check boxes

If the Clarity system is being used in 525 or 1080i (59.94) line operation, drop frame timecodes can be used if required. The Drop Frame check boxes toggle the use of the appropriate drop frame scheme for the current video mode. This will not be available for selection in a video mode that does not use drop frames. To toggle drop frames on and off, check or clear the appropriate Drop Frame box for the desired channel.

9.71.15.4.3 Playback Offset increment boxes

```
(n frames)
```

The Playback Offset increment boxes display a value in frames applied to in and out timecodes for the selected source. To change the playback offset value, enter a new value in the appropriate increment box or use the increment and decrement buttons to jog the value up or down for the desired channel. The default value is 0 frames.

9.71.15.4.4   Record Offset / Frame Sync Compensation Delay increment boxes

`(n frames)`

The Record Offset/Frame Sync/Compensation Delay increment boxes display the time delay in frames from the get command being issued by a Clarity system and the playback actually starting for the selected source. The default value is 1 frame.

This delay is necessary so that an audio stream can be delayed to match the single frame video delay introduced by the video frame synchroniser. This ensures that both the video and audio stream are synchronised before being recorded as clips to the internal or external clip volume. To change the delay value, enter a new value in the increment box or use the increment and decrement buttons to jog the value up or down.

SEE ALSO

Audio delay schematic $\boxed{1079}$

9.72   Licence Entry dialog box

Enables the entry of the licence codes supplied by Pixel Power support that extend the software licence period and add additional features to the software. To display the Licence Entry dialog box, follow the step below:

- Select Licence> $\boxed{435}$Licence Entry $\boxed{436}$. The Licence Entry dialog box is displayed.
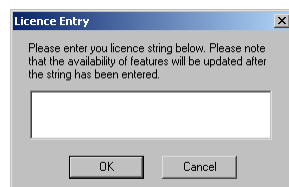
SEE ALSO

Software licensing $\boxed{114}$

9.73   Machine Name dialog box

Enables the specification of a machine (PC or Clarity system) located on the local area network.
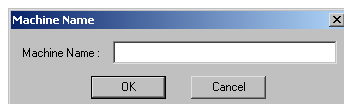
9.74   Merge Video With Key dialog box [CLARITY]

Only available with Clarity systems that feature a clip volume.

The merging of a video clip containing a key or alpha channel with a video clip is achieved using the Merge Video With Key dialog box. To display the Merge Video With Key dialog box, follow the steps below:

1. Display the Clarity Explorer by selecting File> $\boxed{378}$Clarity Explorer $\boxed{382}$.
2. Browse to the desired folder containing the video clip that you want to process.
3. Select the video clip, then right-click and select Process>Merge With Key from the shortcut menu $\boxed{368}$ that appears. The Merge Video With Key dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   736

Copyright © 2000-2006 Pixel Power Ltd.
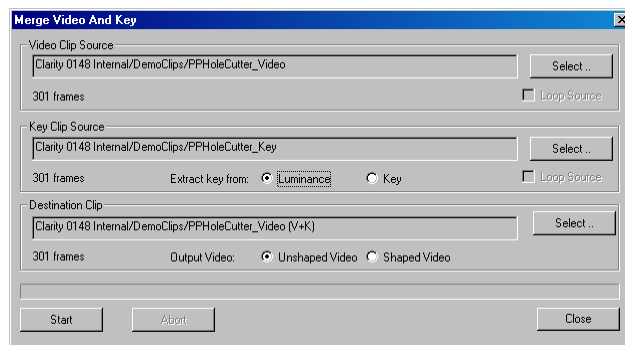
The clip path and name is displayed in the Video Clip Source group box 738 and the destination clip appears in the Destination Clip group box 737, its name appended with (V+K), indicating that the resulting video clip created from the process will contain a key or alpha channel as well as video. You must then select a video clip using the controls in the Key Clip Source group box 737 that contains just an alpha/key channel or a video clip that contains both video and an alpha/key channel.

9.74.1 Destination Clip group box

Displays the clip path and name of the destination video clip that will contain the merged video and key. You can select an alternative destination clip using the Select 738 button.

9.74.1.1 Select button

Click on Select to select an new or alternative destination clip. The Clip Explorer 362 is displayed where you can select a new or alternative clip.

9.74.1.2 Shaped video radio button

The software utilises the additive method of keying when displaying compiled video clips. If you know that the clip defined using the Key Source group box 737 has key data factored into its' image colour data and you want the merged output video clip to show this as shaped video, select the Shaped video option.

9.74.1.3 Unshaped video radio button

The software utilises the additive method of keying when displaying compiled video clips. If you know that the clip defined using the Key Source group box 737 has key data factored into its' image colour data and you DO NOT want the merged output video clip to show this as shaped video, select the Unshaped video option.

9.74.2 Key Clip Source group box

Displays the clip path and name of the key clip containing the key/alpha channel that you want to merge with the video clip listed in the Video Clip Source group box. You can select an alternative key clip using the Select 738 button and optionally loop the clip using the Loop Source 738 option.

9.74.2.1 Key radio button

If the key clip contains ONLY a key/alpha channel and is NOT merged with video, select the Key option to extract the entire key source.

9.74.2.2 Loop Source check box

If the length of the key clip is shorter the length of the video clip, you can optionally loop the key clip to increase is playback duration to match. Select the Loop Source option to achieve this.

9.74.2.3 Luminance radio button

If the key clip contains MERGED video and key (where the key has been factored into the luminance channel of the video clip), select the Luminance option to extract the key source from the luminance of the merged clip.

9.74.2.4 Select button

Click on Select to select an new or alternative key clip. The Clip Explorer $\boxed{362}$ is displayed where you can select a new or alternative clip.

9.74.3 Video Clip Source group box

Displays the clip path and name of the video clip that you want to process. You can select an alternative using the Select $\boxed{738}$ button and optionally loop the clip using the Loop Source $\boxed{738}$ option.

9.74.3.1 Loop Source check box

If the length of the video clip is shorter the length of the key clip, you can optionally loop the source video clip to increase is playback duration to match. Select the Loop Source option to achieve this.

9.74.3.2 Select button

Click on Select to select an new or alternative video clip. The Clip Explorer $\boxed{362}$ is displayed where you can select a new or alternative clip.

9.74.4 Start button

Select Start to start to merge process. The progress of the operation is indicated by the progress bar above.

9.74.5 Abort button

Abort the merge at any time by clicking on the Abort button.

NOTE

If the operation is aborted, no destination video clip will be written.

9.75 Missing Drive Mappings dialog box

Displayed in circumstances where job paths have been added or edited and no corresponding drive mapping has been added using the Drive Maps dialog sub-tab $\boxed{656}$ on the Clarity Server dialog tab $\boxed{655}$ on the Global Preferences dialog box $\boxed{654}$. We recommended that you correct the situation as soon as possible to minimise possible errors during the copying of jobs using the Basic dialog tab $\boxed{612}$ on the Copy Clarity job dialog box $\boxed{605}$ and when viewing Clarity Server content using the Clarity Explorer $\boxed{362}$.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006 738

Copyright © 2000-2006 Pixel Power Ltd.
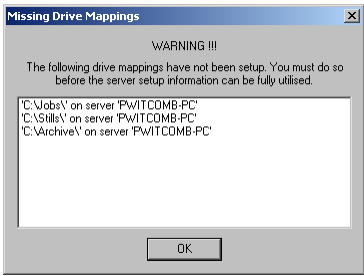
9.76 Motion Marker dialog box

Motion markers [514] only affect the playout of dynamic pages, i.e. those with foreground motion of roll, crawl or croll. If the foreground is static, the motion markers will be ignored, except in the case where they are used in conjunction with the following Cool Move [462] animation effects:

Continuous Ticker [462]
Crawl [462]
Reverse Roll [463]
Reverse Crawl [463] (when there are no Twists or Stagger set)
Roll [463]

The Motion Marker dialog box enables the insertion/configuration of motion markers. To display the Motion Marker dialog box, follow the step below:

- Select Text> [408] Markers>Insert>Motion [411]. The Motion Marker dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
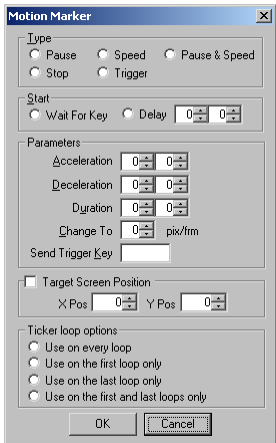
SEE ALSO

Cool Moves [462]
Motion markers [514]
Foreground dialog tab [760]
Page foreground animation [440]
Configuring a target screen area [515]

9.76.1 Type group box

The controls in the Type group box enable the selection of the type of motion marker.

Type	Description
Pause [517]	Used to decelerate, pause, re-start and accelerate animation.

Type	Description
Speed [519]	Used to change the speed foreground rolls or crawls.
Pause & Speed [517]	Used to pause, change the animation speed and re-start animation.
Stop [521]	Used to decelerate and stop animation.
Trigger [523]	Used to trigger other animations on the same page via a defined trigger key.

9.76.2   Start group box

If you have selected the Pause or Pause & Speed marker, the controls in this group box enable configuration of how long animation is paused for. You can configure for the pause to wait for the Take key to be pressed [740] before re-starting animation or pause for a set period of time [740].

9.76.2.1   Wait For Key radio button

Select the Wait option to configure the motion marker to wait for a Take or assigned trigger key keypress before animation is re-started.

9.76.2.2   Delay radio button and increment boxes

A delay can be configured before the re-start of the motion marker. To set a wait time before the pause is re-started:

1.   Select the Delay option.
2.   Enter the delay in seconds and frames in the Delay increment boxes or use the increment and decrement buttons to jog the values up or down.

9.76.3   Parameters group box

The controls in this group box enable the configuration of how the motion marker affects page animation. Depending on the motion marker selected, you can define acceleration [740] and deceleration [740], pause duration [740], speed change [741] and a trigger key [741].

9.76.3.1   Acceleration increment boxes

```
SS:FF
(0 to +3:0 to +24)
```

If you have selected the Pause or Pause & Speed motion marker, enter an acceleration time in `SS:FF` in the Acceleration increment boxes or use the increment and decrement buttons to jog the values up or down.

9.76.3.2   Deceleration increment boxes

```
SS:FF
(0 to +3:0 to +24)
```

If you have selected the Pause, Pause & Speed or Stop motion marker, enter a deceleration time in `SS:FF` in the Deceleration increment boxes or use the increment and decrement buttons to jog the values up or down.

9.76.3.3   Duration increment boxes

If you have selected the Speed motion marker, enter a duration time in `SS:FF` in the Duration increment boxes or use the increment and decrement buttons to jog the values up or down.

9.76.3.4   Change To increment box

If you have selected the Speed motion marker, enter a value (multiplier) in the Change to increment box or use the increment and decrement buttons to jog the values up or down.

9.76.3.5   Send trigger key text box

If you have selected a Trigger motion marker, enter a key in the Send trigger key text box. This key will action any animations on the current page that use the same trigger key when the motion marker is encountered during playback.

9.76.4   Target Screen Position group box and check box

The controls in the Target Screen Position group box enable a screen area to be defined using X and Y positions 741. See Configuring a target screen area 515 for more information. To enable the configuration of a target screen area, ensure that the Target Screen Position box is checked.

9.76.4.1   X Pos and Y Pos increment boxes

Define the screen area that will be affected by the selected motion marker by entering a value in pixels into the X Pos and Y Pos increment boxes or use the increment and decrement buttons to jog the values up or down.

9.76.5   Ticker loop options group box

Motion markers that have been inserted into text pages to control Continuous Ticker animation effects 462 can be configured to action on all loops 741, the first loop only 741, the last loop only 741 and first and last loop only 741.

9.76.5.1   Use on every loop radio button

Select the Use on every loop option to action the Motion marker (inserted into the text that is being animated by the Continuous Ticker effect) every time the ticker loops back to the beginning.

9.76.5.2   Use on the first loop only radio button

Select the Use on the first loop only option to action the Motion marker (inserted into the text that is being animated by the Continuous Ticker effect) the first time that the ticker loops back to the beginning. It will NOT be actioned on subsequent loops.

9.76.5.3   Use on the last loop only radio button

Select the Use on the last loop only option to action the Motion marker (inserted into the text that is being animated by the Continuous Ticker effect) the last time that the ticker loops back to the beginning.

9.76.5.4   Use on the first and last loops only radio button

Select the Use on the first and last loops option to action the Motion marker (inserted into the text that is being animated by the Continuous Ticker effect) the first AND last time that the ticker loops back to the beginning.

9.77   MXF Export dialog box

The MXF Export dialog box enables Pixel Power's propriety .PPV and .PPA video and audio files to be "wrapped" to a single MXF media file for subsequent use with other software applications. MXF export functionality is only available if you have purchased and installed the MXF Plugin [LICENSED] 26 option.

To display the MXF Export dialog box, follow the step below:

741   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

- Select <u>File></u> ⌐378¬<u>Export>MXF Export</u> ⌐383¬. The MXF Import dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
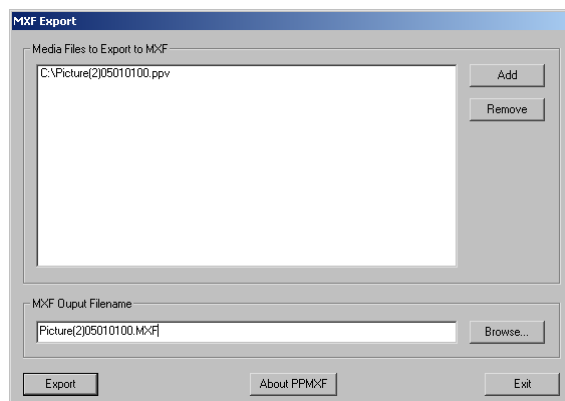
SEE ALSO

<u>MXF files</u> ⌐526¬
<u>Error messages</u> ⌐1088¬

9.77.1   About PPMXF

Select the About PPMXF button to display the About dialog box.
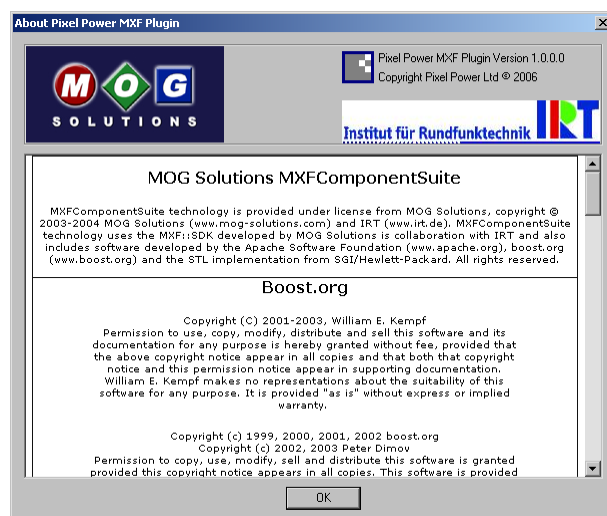
The About dialog box displays important licensing information regarding third party software used to provide the advanced MXF import and export functionality.

9.77.2   Add button

Select Add to display the <u>Open dialog box</u> ⌐748¬ where you can browse and select .PPV and .PPA video and audio files to add to the <u>Media Files to Export to MXF list box</u> ⌐743¬.

9.77.3   Export button

Select Export to start the exporting (wrapping) process. Progress is shown by the Wrapping to MXF progress bar:

9.77.4   Media Files to Export to MXF list box

Lists the .PPV video and .PPA audio clip files selected for wrapping to a single MXF file.

9.77.5   MXF Output Filename text box and Browse button

Enter the file path and file name of the MXF file that you want to write to, remembering to add the .MXF file extension. Alternatively, select Browse to display the <u>Save As dialog box</u> 781 where an existing MXF file can be selected to overwrite. A message is displayed asking if you are sure that you want to overwrite the selected MXF file. Select Yes to return to the <u>MXF Export dialog box</u> 741.

9.77.6   Remove button

Select Remove to remove the selected file(s) from the <u>Media Files to Export to MXF list box</u> 743.

9.78   MXF Import dialog box

The MXF Import dialog box enables MXF media files to be converted to Pixel Power's propriety .PPV and .PPA video and audio files for subsequent use with the CG Tools software and internal/external clip stores. There are two versions of the MXF Import dialog box. If you have not purchased and installed the <u>MXF Plugin [LICENSED]</u> 26 option, then the basic version of the MXF Import dialog box is displayed. The basic version provides limited functionality.

To display the MXF Import dialog box, follow the step below:

- Select File> ⌐378¬Import>MXF Import ⌐382¬.

    If you have NOT purchased and installed the MXF Plugin [LICENSED] ⌐26¬ option, then the basic version of the MXF Import dialog box is displayed. If you HAVE purchased and installed the MXF Plugin [LICENSED] ⌐26¬ option, the Open dialog box ⌐748¬ is displayed. Select the desired .MXF file and then select OK. The advanced version of the MXF Import dialog box is then displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
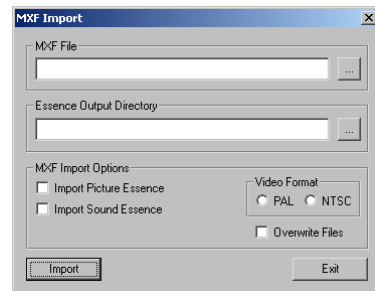
    Basic   **Advanced**
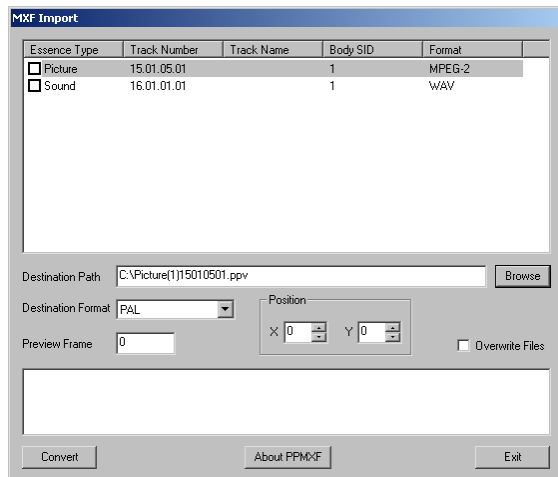
SEE ALSO

MXF files ⌐526¬
Error messages ⌐1088¬

9.78.1   About PPMXF

Select the About PPMXF button to display the About dialog box.
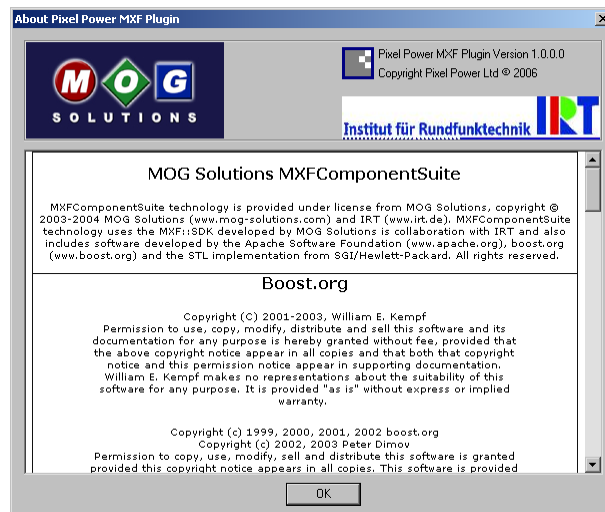
The About dialog box displays important licensing information regarding third party software used to provide the advanced MXF import and export functionality.

9.78.2   Convert button

Select the Convert button to convert the essence types selected in the Information window 746 .

9.78.3   Destination Format drop-down list box

`(PAL, NTSC)`

The Destination Format list box enables you to select the destination video format of the designated .PPV that you want to convert to. Select the video format that you want to save the .PPV file in, depending on your requirements. By default, the video format selected matches the default video format for the CG Tools software specified using the Page Formats dialog tab 819 on the User Preferences dialog box 809 .

9.78.4   Destination Path text box and Browse button

`(destination file path, destination filename)`

To define the destination path and file name of an essence type to be exported, you must highlight the essence type first in the Information window 746 before specifying a path and file name using the Destination Path text box and Browse button.

By default, the destination path is originated from the MXF source file location and the filename is interpreted from the essence type, Body Stream ID (SID) and track number (if present). For example, selecting a Sound essence type with an SID of 1 and the track number 06.01.10.00 will result in the following filename :

`Sound(1)06011000.ppa`

Edit the file path and file name in the Destination Path text box or select the Browse button and browse to the desired location and/or destination .PPV or .PPA file. If the browse button is selected, the Save As dialog box 781 appears where you can browse and select the desired path and/or existing .PPV or .PPA file.

You cannot convert directly to an internal or external clip drive, you must write to a local or network location before copying the clips using the Clarity Explorer 362 .

NOTE

If the highlighted essence type is `Compound` (combined digital video and audio), you can only select to export to a .PPV video file. An associated audio .PPA audio file using the same naming convention will be created that is dynamically linked (associated) to the .PPV video file.

9.78.5   Essence Output Directory group box

Applicable to the basic version of the MXF Import dialog box only.

`(destination file path)`

By default, the destination path is originated from the MXF source file location.

Edit the file path in the Essence Output Directory text box or select the Browse button and browse to the desired location. After selecting Browse, the Browse for Folder dialog box is displayed.
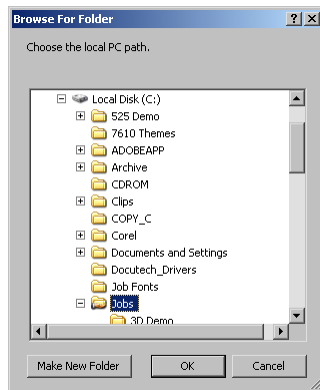
Browse to the drive and folder that you want to write to, then select OK to revert back to the MXF Import dialog box.

You cannot output directly to an internal or external clip drive, you must write to a local or network location before copying the clips using the Clarity Explorer 362.

9.78.6 Exit button

Select Exit to close the MXF Import dialog box and cancel the import operation.

9.78.7 Information window

The information window lists essence containers in the current .MXF file. The following columns are displayed.

Column	Description
Essence Type	MXF bundles together video, audio, and programme data such as text. These are referred to as essence types. The supported essence type available for conversion are `Picture` (video), `Sound` (audio), and `Compound` (video and audio). If desired, you can display more information about the essence type by hovering the over the pointer over the essence type. A popup is displayed if any additional information can be interpreted. For example, for the `Picture` essence type could show additional aspect ratio (`nn:nn`) and video format information (`nnnn x nnnn`); the `Sound` essence type could display the sampling rate (KHz) and word length (bits). To select an available essence type to be imported, check the box adjacent to the name. Clear the box if you do not want to import an available essence type. To define the destination path and file name of an essence type to be exported, you must highlight the essence type first before specifying a path and file name using the Destination Path text box and Browse button 745.
Track Number	Track number of the essence type.
Track Name	Track name of the essence type.
Body SID	Stream identifier for the essence type (the essence container).
Format	Low level format of the essence type. The supported formats are those defined in the official MXF specification. For example, the `Picture` essence type could be MPEG2 527 or D10 527 etc., `Sound` could be AES3 and `Compound` can be DV (combined digital video and audio).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   746

Copyright © 2000-2006 Pixel Power Ltd.

9.78.8 Import button

Applicable to the basic version of the MXF Import dialog box only.

Select the Import button to convert the MXF file selected in the MXF File text box⌐747⌐.

9.78.9 Overwrite files check box

Check the Overwrite Files box to ensure that existing .PPV and .PPA files with the same name are overwritten in the specified destination folder.

9.78.10 MXF Import Options group box

Applicable to the basic version of the MXF Import dialog box only.

The controls in the MXF Import Options group box enable the selection whether picture⌐747⌐ and/or sound⌐747⌐ is extracted, whether extracted files are overwritten⌐747⌐ and the video format of extracted video⌐747⌐.

9.78.10.1 Import Picture Essence check box

Check the Import Picture Essence box to ensure that video is extracted to .PPV (if available) from the selected MXF file.

9.78.10.2 Import Sound Essence check box

Check the Import Sound Essence box to ensure that audio is extracted to .PPA (if available) from the selected MXF file.

9.78.10.3 Overwrite files check box

Check the Overwrite Files box to ensure that existing .PPV and .PPA files with the same name are overwritten in the specified destination folder.

9.78.10.4 Video Format group box

The controls in the Video Format group box enable you to select the video format of the extracted video. Select the video format that you want to save the .PPV file in, depending on your requirements. By default, the video format selected matches the default video format for the CG Tools software specified using the Page Formats dialog tab⌐819⌐ on the User Preferences dialog box⌐809⌐.

9.78.11 MXF File group box

Applicable to the basic version of the MXF Import dialog box only.

Edit the file path in the MXF File text box or select the Browse button and browse to the desired source MXF file. If the browse button is selected, the Open dialog box⌐748⌐ appears where you can browse and select the MXF file.

9.78.12 Position group box

`(+/- n pixels)`

The X and Y increment boxes can be used to specify the origin in pixels of the bottom left corner of source video in the destination .PPV file.

For example, if the `Picture` video source has a smaller X/Y size compared to the format selected using the Destination Format drop-down list box, you can use the Position X and Y increment boxes to centre the source video

area within the confines of the destination video area. Alternatively, if the `Picture` video source has a larger X/Y size compared to the destination format, you can use the Position X and Y increment boxes to configure a region of the source video area to be cropped.

9.78.13 Preview Frame text box

`(n)`

Enter the number of the frame in the source `Picture` essence type that will be subsequently specified as the browse frame in the converted .PPV video file. The Browse frame is displayed and can be subsequently changed when previewing .PPV video files using the Clarity Explorer 362.

9.78.14 Status window

The Status window displays information relating to the status of an MXF file conversion. This information may be useful if errors are encountered during conversion.

SEE ALSO

Error messages 1088

9.79 Open (Generic) dialog box

The generic Open dialog box is displayed when general file selection is required. Usually launched from a parent dialog box.
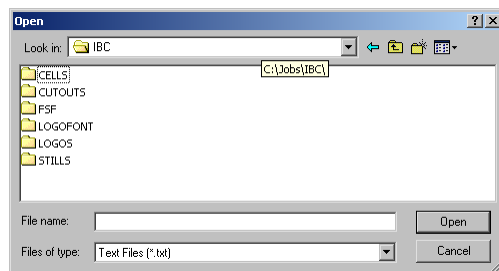
1. To display files of all types, select All Files from the Files of Type drop-down list box.
2. Browse to location where the file is located.
3. Select the desired file.
4. Select Open to open the selected file and return to the application or launching dialog box.

9.80 Open Background Picture dialog box

The insertion of page backgrounds or selection of an image stack is achieved using the Open Background Picture dialog box.

- To display the Open Background Picture dialog box, select either Select Picture from the Background dialog tab 756 on the Page Settings dialog box 751 or File> 378 Import>Import Image Stack 382. The Open Background Picture dialog box is displayed.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   748

Copyright © 2000-2006 Pixel Power Ltd.
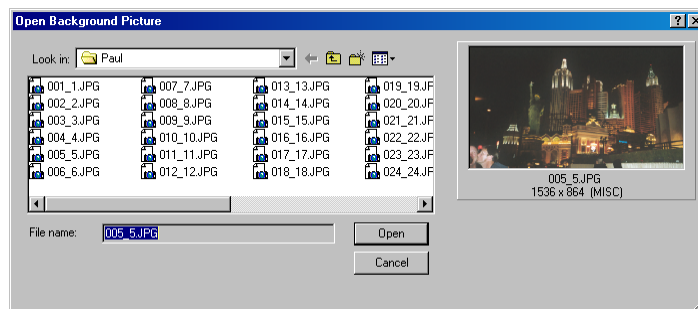
1.   Browse to location where the image is located.
2.   Select the desired image.
3.   Select Open to insert the selected image as the page background and return to the Page Settings dialog box 751
      .

9.81   Open Cutout Picture dialog box

The insertion of cutout images is achieved using the Open Cutout Picture dialog box.

• To display the Open Cutout Picture dialog box, select Graphics> 395 Shapes>Cutout 403 . Alternatively, you can select the Cutout tool from the Shape toolbox 319 on the Graphic Tools 266 toolbar.
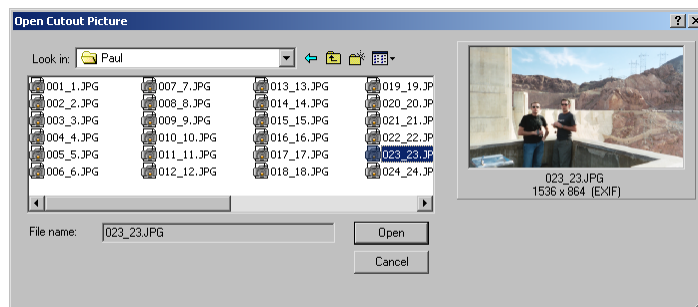
1.   Browse to location where the image is located.
2.   Select the desired image.
3.   Select Open to insert the selected image a cutout.

9.82   Open Glyph dialog box

The selection of a glyph image for the selected logo font character is achieved using the Open Glyph dialog box.

• To display the Open Glyph dialog box, select Browse from the Edit Logo Character Glyph dialog box 626 . The Open Glyph dialog box is displayed.
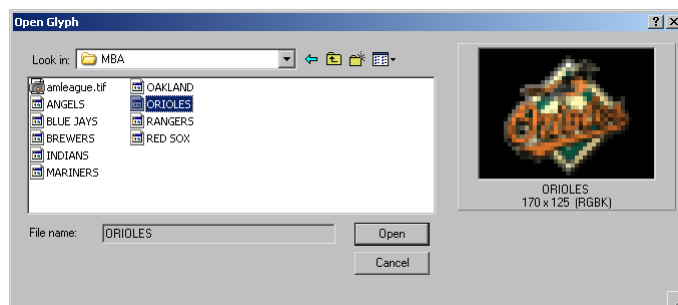
1.   Browse to location where the image is located.
2.   Select the desired image.
3.   Select Open to define the selected glyph image for the selected logo font character.

9.83 Open Job dialog box

The opening of jobs is achieved using the Open Job dialog box.

- To display the Open Stack dialog box, select File> |378 Open Job |380.
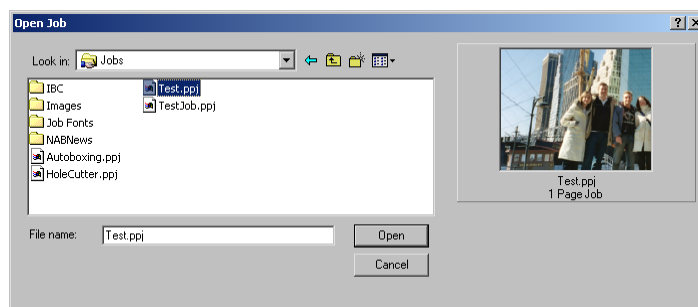
1. Browse to location where the job is located.
2. Select the desired job.
3. Select Open to open the selected job and return to the application.

9.84 Open Stack dialog box

The opening of page stacks is achieved using the Open Stack dialog box.

- To display the Open Stack dialog box, select File> |378 Open Stack |380.
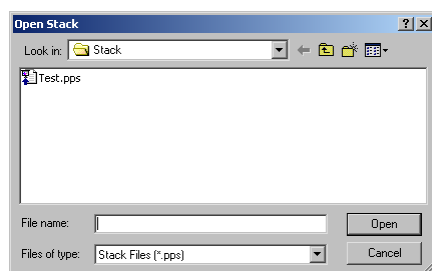
1. Browse to location where the page stack is located.
2. Select the desired page stack.
3. Select Open to open the selected page stack and return to the application.

9.85 Open Texture Picture dialog box

The insertion of texture image into the texture image buffer is achieved using the Open Texture Picture dialog box.

- To display the Open Texture Picture dialog box where a image can be selected, select Select on the Texture control tab |294 on the Graphic Tools |266. The Open Texture Picture dialog box is displayed.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   750

Copyright © 2000-2006 Pixel Power Ltd.
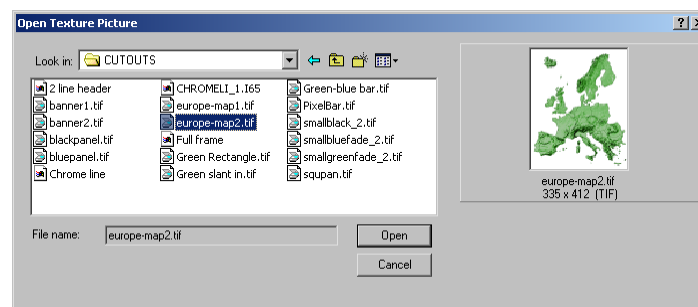
1. Browse to location where the image is located.
2. Select the desired image.
3. Select Open to insert the selected image into the texture image buffer.

9.86 Open/Insert Cel Animation dialog box

The insertion of cel animations is achieved using the Open/Insert Cel Animation dialog box.

- To display the Open/Insert Cel Animation dialog box where a cel animation can be selected, select Text> [408] Insert Cel [417] or Graphics> [395] Cels/Video>Cel Animation. [404] The Open/Insert Cel Animation dialog box is displayed.
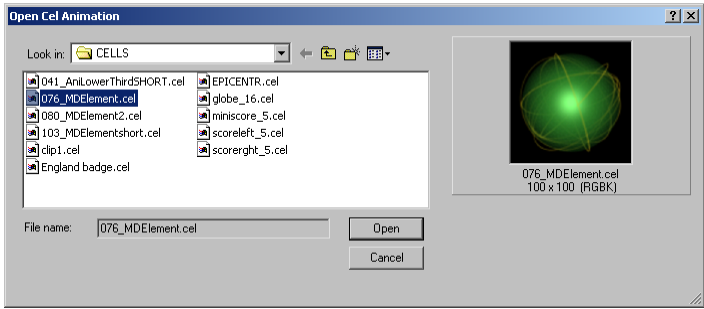
1. Browse to location where the cel animation is located.
2. Select the desired cel animation.
3. Select Open to insert the selected cel animation into the current text page or page foreground.

9.87 Page Settings dialog box

The configuration of a single page or group of pages is achieved using the Page Settings dialog box. When the Page Settings dialog box is displayed, the settings shown, by default, will be those specific to the page currently open with the Graphic Edit window [260] or the page currently highlighted in the Page Browser [251] or Page list [252]. If you want to configure page attributes common to a selection of multiple pages, select them in the normal manner and then display the Page Settings dialog box using the one of the methods explained below.

To display the Page Settings dialog box where page configuration can be achieved, follow any of the methods listed below:

- double-click on the desired page or group of pages in the Page List, with the confines of the Foreground, Transition and Page Format columns;
- right-click on the desired page or group of pages in the Page Browser or Page List, and then select Edit Page Settings from the shortcut menu that appears;
- select Page> [390] Edit Settings [392].

A message may appear asking if you want to save the changes to the pages currently open in the Graphic Edit window. Select Yes to save the changes or No to proceed without saving the changes.

The Page Settings dialog box is displayed. The dialog box contains eight dialog tabs. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of
Audio [752]	Background audio clip settings including the specification of audio clips [753], starting frame [753], clip gain [753], clip continuation [753], looping [753] and restart [753] and specifying separate mono tracks [753].
Automation [754]	Automation settings including associating page backgrounds to field ID's [754] and assigning 'pre' [755] and 'post' [755] scripts to pages.
Background [756]	Background settings including background type [757] (shading, picture [758] or video etc), configuration of video background [759] and preview [757].

Tab	Enables configuration of
Foreground 760	Foreground settings including animation type 761 and triggers 760, animation parameters 761 and timing 762.
Key / Matte 763	Keying and matte configuration including protecting the foreground using the key from the background image 764 or custom key from a selected image 764, mixing page foreground graphics over a live background 765 and including the background key in the final video output. 765
Page Formats 765	Format settings including video standard 766 and aspect ratio 765.
Timecode 766	Timecode settings including timecode in 766 and timecode out 767.
Transition 767	Transition settings including configuring background transition offset 767, transition type 770 and configuring transition parameters 768.

After closing the Page Settings dialog box after prior page format/aspect ratio configuration using the Page Formats dialog tab, page previews in the Page Browser and page format descriptions in the Page List will update with the new video standard and/or aspect ratio information. If the criteria is correct, any page elements contained on the converted pages will be converted to match the new video standard.

A dialog box is displayed listing the progress, filename and location of saved page elements.

9.87.1 Audio dialog tab

To configure page background audio clip settings, follow the steps below:

1. Select the Audio dialog tab on the Page Format dialog box. The Audio dialog tab appears.
2. Select either the A1/A2 752 or A3/A4 752 dialog sub-tab to configure background audio clip settings.

For more information on page background audio clips, see Page background audio. 443

9.87.1.1 A1/2/3/4 dialog sub-tab

To select which audio tracks to configure, follow the steps below:

- Select either the A1/A2 sub-tab to configure audio for the first stereo pair or the A3/A4 sub-tab to configure audio for the second stereo pair. Both sub tabs are have identical user interface features.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
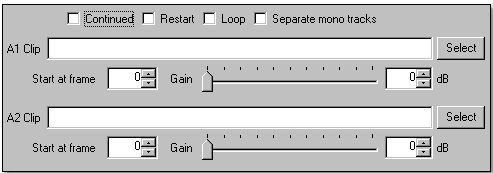
SEE ALSO

Page background audio 443

9.87.1.1.1 (A1/A2/A3/A4) Clip text box

Enter the file path of the audio clip that you want to use in the this text box. Alternatively, select the <u>Select</u> 753 button to browse local or remote clip stores.

NOTE

Only the A1 or A3 clip text boxes and related <u>Select buttons</u> 753 will be available unless the <u>Separate mono tracks box</u> 753 is checked. See <u>Page background audio</u> 443 for more information.

SEE ALSO

<u>Separate mono tracks check box</u> 753

9.87.1.1.2 Continued check box

To continue playback of audio clip(s) configured on the previous page that was played out from the <u>Page Browser</u> 251 or <u>Page Stack</u> 325, ensure that the Continued box is checked.

9.87.1.1.3 Gain slider annd increment box

(-48db – +12db)

Use this slider bar to adjust the gain level of the designated audio clip. Alternatively, enter a value in db in the increment box or use the increment and decrement buttons to jog the value up or down.

9.87.1.1.4 Loop check box

Check the Loop box to ensure that the designated audio clip is looped back to the beginning during page playback.

9.87.1.1.5 Restart check box

In situations where the current page has the same audio clip(s) designated as in previous pages in the <u>Page Browser</u> 251 or <u>Page Stack</u> 325, check the Restart box to ensure that the audio clip(s) are re-started every time the page is taken.

9.87.1.1.6 Select button

Click on the Select button to browse local or remote clips stores for your desired audio clip. The Clarity Explorer is displayed. For more information of using the Clarity Explorer, see <u>Clarity Explorer</u> 362.

NOTE

Only the A1 or A3 Select buttons will be available unless the <u>Separate mono tracks box</u> 753 is checked. See <u>Page background audio</u> 443 for more information.

9.87.1.1.7 Separate mono tracks check box

Check the Separate mono tracks check box if you want to specify separate mono tracks. You will have to specify two audio clips instead of a single clip. The A2 or A4 Clip text box will become enabled, enabling you to select a separate additional audio clip. The Clarity Explorer is displayed. For more information of using the Clarity Explorer, see <u>Clarity Explorer</u> 362.

9.87.1.1.8 Start at frame increment box

Use this increment box to configure the starting point within the designated audio clip. Enter a value in frames or use the increment and decrement buttons to jog the value up or down.

9.87.1.2 Mute channel output audio when page is active check box

All output audio can now be muted when specified pages are active. This is helpful in situations where the Clarity system is required to include audio when it is displaying a still, without the supplied embedded audio being distributed. Check the Mute channel output audio when page is active box to enable this feature. The mute status is shown on the relevant audio meters 445.

9.87.2 Automation dialog tab

To configure page automation settings, follow the steps below:

- Select the Automation dialog tab on the Page Settings dialog box 751. The Automation dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

SEE ALSO

Page background field update commands 477
Page and field scripting 528
Page pre-script (JobPagePreScript) 529
Page post-script (JobPagePostScript) 530
Page background script (PageBackgroundScript) 530

9.87.2.1 Background associated to 'Field ID' group box

The background of pages can be associate to with a field ID, enabling the background to be changed by an automation system. Additionally, you can then configure script to be run when the field is updated.

SEE ALSO

Page background field update commands 477
Page background script (PageBackgroundScript) 530
Page and field scripting 528

9.87.2.1.1 Attach field to VB script check box

Check this box to enable the specification of a Visual Basic script to the designated background field ID.

9.87.2.1.2 Background associated to 'Field ID' check box

Check this box to enable the association of a field with the current page background.

9.87.2.1.3 Browse button

1. Click on the Browse button to browse the local or network file system for your desired script file. The Open dialog box |748| is displayed.
2. Browse to the desired location in the normal way, then select the desired script file.
3. Click on OK to return to the Automation |754| dialog tab.

9.87.2.1.4 Field ID increment box

Use this increment box to configure the field ID to which the page background will be associated. Enter a value or use the increment and decrement buttons to jog the value up or down.

9.87.2.1.5 Script Path text box

Enter the file path of the background field script that you want to use in the this text box. Alternatively, select the Browse |755| button to browse the local or network file system.

9.87.2.2 Page uses a 'Post' script group box

Page can be configured to run a script after ('Post') they have played out.

SEE ALSO

Page post-script (JobPagePostScript) |530|
Page and field scripting |528|

9.87.2.2.1 Browse button

1. Click on the Browse button to browse the local or network file system for your desired 'Post' script file. The Open dialog box |748| is displayed.
2. Browse to the desired location in the normal way, then select the desired script file.
3. Click on OK to return to the Automation |754| dialog tab.

9.87.2.2.2 Page uses a 'Post' script check box

Check this box to enable the specification of a 'Post' script for the current page.

9.87.2.2.3 Script Path text box

Enter the file path of the 'Post' script that you want to use in the this text box. Alternatively, select the Browse |755| button to browse the local or network file system.

9.87.2.3 Page uses a 'Pre' script group box

Pages can be configured to run a script before ('Pre') they have played out.

SEE ALSO

Page pre-script (JobPagePreScript) |529|
Page and field scripting |528|

9.87.2.3.1 Browse button

1. Click on the Browse button to browse the local or network file system for your desired 'Pre' script file. The Open dialog box |748| is displayed.
2. Browse to the desired location in the normal way, then select the desired script file.
3. Click on OK to return to the Automation |754| dialog tab.

9.87.2.3.2 Page uses a 'Pre' script check box

Check this box to enable the specification of a 'Pre' script for the current page.

9.87.2.3.3 Script Path text box

Enter the file path of the 'Pre' script that you want to use in the this text box. Alternatively, select the Browse [755] button to browse the local or network file system.

9.87.2.4 Linked to Global Field check/group box

Check the Linked To Global Field box to link the selected page template field to a global field. The controls in the group box are enabled.

9.87.2.4.1 Global Field ID increment box

Enter the global field that you want to link to using the Global Field ID text box. Global fields are defined using the Global Fields Manager control box [333].

9.87.2.4.2 Data text box

If the selected global field contains data, then this data will appear in the Data text box. To change the listed global field, double-click within the Data text box to display the Global Field Selection dialog box [669] where you can select an alternative global field.

9.87.2.4.3 Description text box

If the selected global field contains a description, then this will appear in the Description text box. To change the listed global field, double-click within the Description text box to display the Global Field Selection dialog box [669] where you can select an alternative global field.

9.87.3 Background dialog tab

The software enables you to assign three types of backgrounds to pages - live video, pictures or background colours. To configure page background settings, follow the steps below:

- Select the Background dialog tab on the Page Settings dialog box [751]. The Background dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

SEE ALSO

Page background field update commands [477]
Page background script (PageBackgroundScript) [530]

9.87.3.1 Preview window

The Preview window shows how the page background will look, before selecting OK to accept the current settings and close the Page Settings dialog box 751. The preview will update if you make any changes to any relevant settings on the Background dialog tab e.g. colour, picture file or video clip.

If a picture background is selected, a preview of the selected picture will be shown. The picture filename and additionally the aspect ratio and colour model are shown if they can be determined.

If a video clip or video and associated audio clip background is selected, then detailed information about the selected clip will be shown in the Preview window. This will include the clip name and path locating the clip on the selected clip store. Additionally, the loop mode 590, loop duration 590, the playback in and out points 589, speed/duration 589 and whether the clip is set to pause 591 during playback may also be shown.

9.87.3.2 Type radio buttons

The radio buttons down the left hand side of the Background dialog tab enable the selection of differing background types.

SEE ALSO

9.87.3.2.1 Black radio button

Select the Black option to specify a solid black background for the current page or range of pages.

NOTES

This is the default setting.

9.87.3.2.2 Continued radio button

Select the Continued option to specify that a background video clip specified on a previous page will continue as the background on the current page.

9.87.3.2.3 Gouraud radio button

Select the Gouraud option to enable the selection of a Gouraud shaded background for the current page or range of pages.
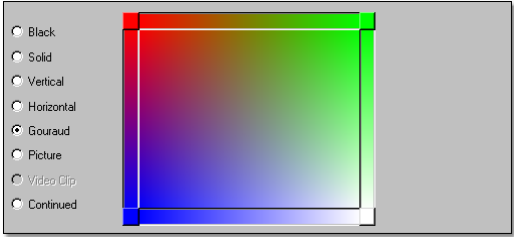
To select a colour, follow the steps below:

1. Click on a corner colour selection box in the Preview window. The <u>Colour Selection dialog box</u> |599| is displayed.
2. Select a colour from the Colour Selection dialog box.
3. Select OK to return to the <u>Background</u> |756| dialog tab.

9.87.3.2.4 Horizontal radio button

Select the Horizontal option to enable the selection of a horizontal linear shaded background for the current page or range of pages.
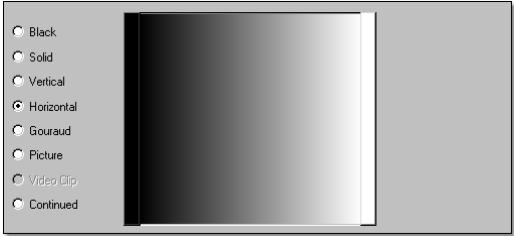
To select a colour, follow the steps below:

1. Click on the left or right colour selection bars in the Preview window. The <u>Colour Selection dialog box</u> |599| is displayed.
2. Select a colour from the Colour Selection dialog box.
3. Select OK to return to the <u>Background</u> |756| dialog tab.

9.87.3.2.5 Picture radio button

Select the Picture option to enable the selection of a bitmap background for the current page or range of pages.

To select a picture, select the Select Picture button; to reset, select the Reset button. To override the key stored in the picture, check the Override Key check box.

Override key check box

Check the Override key box to override the keying values stored with the selected picture with full 100% key. Page background images which are imported from files containing no key/alpha information are assumed to have full-key.

Reset button

Select the Reset button to reset the current background picture.

Select Picture button

Select the Select Picture button to display the Open Background Picture dialog box [748] where you can select a new picture as the current background.

9.87.3.2.6   Solid radio button

Select the Solid option to enable the selection of a solid colour background for the current page or range of pages.

To select a colour, follow the steps below:

1.   Click click in the Preview window. The Colour Selection dialog box [599] is displayed.
2.   Select a colour from the Colour Selection dialog box.
3.   Select OK to return to the Background [756] dialog tab.

9.87.3.2.7   Vertical radio button

Select the Vertical option to enable the selection of a vertical linear shaded background for the current page or range of pages.

To select a colour, follow the steps below:

1.   Click on the top or bottom colour selection bars in the Preview window. The Colour Selection dialog box [599] is displayed.
2.   Select a colour from the Colour Selection dialog box.
3.   Select OK to return to the Background [756] dialog tab.

9.87.3.2.8   Video Clip radio button [CLARITY]

Selecting the Video Clip option enables the selection of either:

•   video clip background for the current page;
•   a video and associated audio clip for the current page.
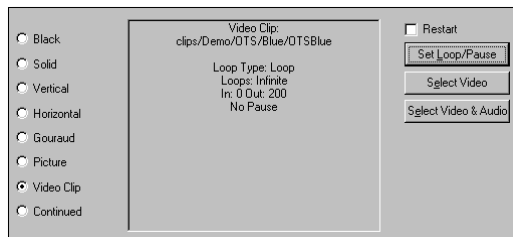
To select a clip, select the Select Video button or Select Video & Audio button. Once a video or video/audio clip has been selected, you can the edit the looping and pausing of the selected clip and also select whether the clip should re-start after it has completed its playback.

Restart check box

Check the Restart box to ensure that the selected clip restarts playback after it has reached its final frame.

Select Video & Audio button

Select the Select Picture button to display the Clarity Explorer 362 dialog box where you can select a clip drive from the right-hand pane and then a video clip or video and associated audio clip from the left hand pane. After selecting OK on the Clarity Explorer 362, you are returned to the Background dialog tab 756 where information about the selected video and/or audio clip is shown in the Preview window 757. After selecting a clip, you can then configure loop and pause settings for the video or video/associated audio clip using the Set Loop/Pause button.

Select Video button

Select the Select Picture button to display the Clarity Explorer 362 where you can select a clip drive from the right-hand pane and then a video clip from the left hand pane. After selecting OK on the Clarity Explorer 362, you are returned to the Background dialog tab 756 where information about the selected video clip is shown in the Preview window 757. After selecting a clip, you can then configure loop and pause settings for the video clip using the Set Loop/Pause button.

Set Loop/Pause button

Select the Loop/Pause button to configure playback settings for the selected clip. The Cel Animation\Video Clip Playout dialog box 587 is displayed.

9.87.4 Foreground dialog tab

To configure page foreground settings, follow the steps below:

- Select the Foreground dialog tab on the Page Settings dialog box 751. The Foreground dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
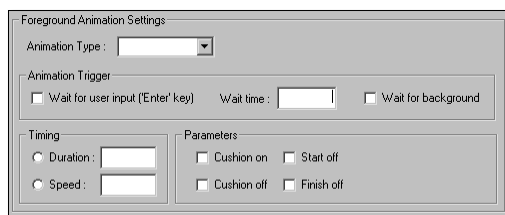
9.87.4.1 Animation Trigger group box

The Animation Trigger group box enables the configuration of how foreground animations are controlled. You can configure the foreground animation to wait for the page background transition 761, user input 761 or for a period of time 761.

9.87.4.1.1   Wait for background check box

The foreground animation can be set to start at the same time as the page transition. Follow the step below:

- Check the Wait for background command on to start foreground animation at the same time as the page transition.

9.87.4.1.2   Wait for user input check box

A wait can be selected at the start of the foreground motion. To wait for a trigger before the foreground motion starts, follow the step below:

- Ensure that the Wait for user input box is checked.

The software will wait for a Take key press before proceeding with the foreground motion when the page is replayed whilst online. Clear the Wait for user input box to start the foreground motion as soon as the transition from the previous page has completed.

9.87.4.1.3   Wait time text box

A wait time can be configured before the start of the foreground motion. To set a wait time before the foreground motion begins, follow the steps below:

- In the Wait increment box, enter the wait time in seconds and frames.

The software will wait for the specified time before proceeding with the foreground motion when the page is replayed whilst online.

9.87.4.2   Animation Type drop-down list box

`(Static, Roll, Crawl, Croll)`

Page foreground motion can be chosen as Static (no motion), Roll (vertical upward movement), Crawl (horizontal right to left movement) or Croll (any angle movement). To configure the foreground motion for the selected page(s), follow the step below:

- Select Static, Roll, Crawl or Croll from the Type drop-down list box. If Croll is selected, the angle should be set using the Croll Angle increment box to the required movement direction in the range 0 to 359 degrees.

NOTE

When either the Roll, Crawl or Croll commands are selected, the additional parameters for controlling the motion will be enabled in the Parameters group box. Motion markers within foreground text can be used to control foreground animation if desired.

SEE ALSO

Page foreground animation 440
Motion markers 514

9.87.4.3   Parameters group box

The overall extent of the foreground motion is determined by the extent of the foreground page elements distributed on the selected page(s). Often it is useful to force the foreground to start outside the visible screen area and finish outside the visible screen area. The Start off 762 and Finish off 762 check boxes facilitate this. More sophisticated control of the movement extent can is provided through the use of top and bottom motion markers within a page of text. A cushion can also be applied to foreground motion. The Cushion on 762 and Cushion Off 762 check boxes facilitate this.

SEE ALSO

Motion markers 514

9.87.4.3.1 Croll angle increment box [COLLETTE FOR COLLAGE]

`(0 to 359 degrees)`

If Croll has been selected from the <u>Animation Type drop-down list box</u> |761⟩, you can configure the angle to the required movement direction in the range 0 to 359 degrees. To configure the croll angle, follow the step below:

- In the Croll Angle increment box, enter the duration direction in the range 0 to 359 degrees or use the increment and decrement buttons to jog the value up or down.

9.87.4.3.2 Cushion off check box

The foreground motion can be set to stop smoothly. Follow the step below:

- Check the Cushion off box to configure the page to decelerate gradually to a halt at the end of the motion. Clear the Cushion off box for an instantaneous stop to the motion.

NOTE

If the motion is finishing off screen, the Cushion off check box will have no effect.

9.87.4.3.3 Cushion on check box

The foreground motion can be set to start smoothly. Follow the step below:

- Check the Cushion on box to configure the page to accelerate gradually from still to full speed at the start of the motion. Clear the Cushion on box for an instantaneous start to the motion.

NOTE

If the motion is starting off screen, the Cushion on check box will have no effect.

9.87.4.3.4 Finish off check box

Check the Finish off box to finish the foreground motion outside the visible screen area. The motion will finish outside the visible screen area; no foreground elements will be visible at the end of the roll crawl or croll.

Clear the Finish off box to finish motion within the visible screen area.

9.87.4.3.5 Start off check box

Check the Start off box to start the foreground motion outside the visible screen area. The motion will start outside the visible screen area and move into view as the roll, crawl or croll progresses.

Clear the Start off box to start motion within the visible screen area.

9.87.4.4 Timing group box

The speed of the foreground motion can be set either as a particular <u>speed</u> |763⟩ in lines per field or as a total <u>duration</u> |763⟩ for the movement in seconds. The software features smooth interpolation of the foreground motion plane, enabling movement at any speed without jerking.

NOTES

- If the speed is too fast for the complexity of foreground, the motion will pause to allow the rendering to complete. If this happens, either check that the job has been saved with cache enabled, reduce the complexity of the foreground or use a slower speed.
- If the foreground motion appears to shimmer or flicker at certain speeds, then it may be necessary to select soft filtering. See <u>Graphics Filter Mode group box</u> |817⟩ on the <u>Edit dialog tab</u> |810⟩ on the <u>User Preferences dialog box</u> |809⟩ for more information.

9.87.4.4.1 Duration text box

To set a duration for the foreground motion on a page, follow the steps below:

1. Select Duration option if it is not already selected.
2. In the adjacent text box, enter the duration required in seconds.

The corresponding speed of the motion will be updated to reflect the new duration.

9.87.4.4.2 Speed text box

To set a speed for the foreground motion on a page, follow the steps below:

1. Select the Speed option if it is not already selected.
2. In the adjacent text box, enter the speed required in lines per field.

The corresponding duration of the motion will be updated to reflect the new speed.

9.87.5 Key / Matte dialog tab

The key channel of the background picture or a custom defined key can be used to provide a window for the foreground; this enables windowed rolls and crawls to be performed. The key from the background picture can itself can also be output if required.

To configure page protection settings, follow the steps below:

*   Select the Key / Matte dialog tab on the Page Settings dialog box 751. The Key / Matte dialog tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
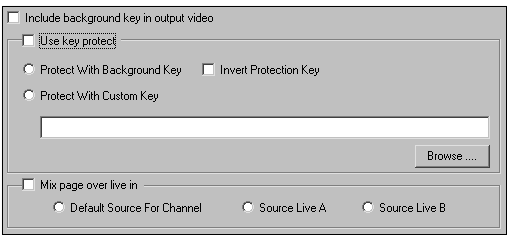
9.87.5.1 Include background key in output video check box

To ensure that the key associated with any page background images is NOT passed through in the CG output video, clear the Include background key in output video box. This setting is useful in circumstances were you do not want the key or alpha channel of a background image that is being used to protect the page foreground to be passed in the output video stream. If this option is turned on, it may affect final output if you are mixing the Clarity output using a downstream keyer further on in the broadcast video chain.

9.87.5.2 Mix page over live in check/group box

The live video source for the selected page or group of pages can be configured using the options in the Mix page over live in group box. Check the Mix page over live in box to enable the controls.

After selecting the desired option, when the Page Settings dialog box 751 is closed, the page or group of pages that have had their page background set to live and have had the live video source configured will show differing settings within the Background column of the Page List 252.

Live video source setting	Symbol shown in the Page List
Default Source For Channel	(D)
Source Live A	(A)
Source Live B	(B)

763   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.87.5.2.1   Default Source For Channel radio button

Select the Default Source For Channel option to ensure that the default video source for the channel on which you play out the page(s) is used as the page background. This is the default setting. The default live video source for any available channels can be configured using the Chan A/B dialog tab ⌐790⌐ on the SD Hardware Configuration dialog box ⌐786⌐ in the CG Tools software.

9.87.5.2.2   Source Live A radio button

Select the Source Live A option to use the live video input A on any Clarity system unit being used to playout the page.

9.87.5.2.3   Source Live B radio button

Select the Source Live B option to use the live video input B on any Clarity system unit being used to playout the page.

9.87.5.3   Use key protect check/group box

To enable page protection, check the Use key protect box. Alternatively, you can select the Protect tool on the Job/Page toolbar ⌐248⌐. The key channel of the background picture or a custom key will be used to window the foreground elements.

Show Matte RapidAction key ⌐191⌐

NOTE

If protecting using the background picture for the page, the picture must contain a valid key channel (i.e. be saved as an RGBK or YUVK picture).

9.87.5.3.1   Invert Protection Key radio button

The key channel of the background picture or a custom defined key can be inverted if desired. To ensure that the key is inverted, select the Invert Protection Key option.

9.87.5.3.2   Protect With Background Key radio button

To protect using the key supplied by the current background picture, ensure that the Protect With Background Key option is selected.

9.87.5.3.3   Protect With Custom Key radio button, text box and Browse button

To protect using a custom key supplied by a user defined image, follow the steps below:

1.   Select the Protect With Custom Key option.
2.   In the text box below, enter the desired path and file name of the image file that will supply the key channel or select Browse. The Select Custom Key Protection Image dialog box ⌐797⌐ is displayed.

NOTE

If protecting using the a custom image, the image must contain a valid key channel (i.e. be saved as an RGBK or YUVK picture).

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   764

Copyright © 2000-2006 Pixel Power Ltd.

9.87.6 Page Format dialog tab

To configure page format settings, follow the steps below:

• Select the Page Format dialog tab on the Page Settings dialog box 751 . The Page Format dialog tab appears.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
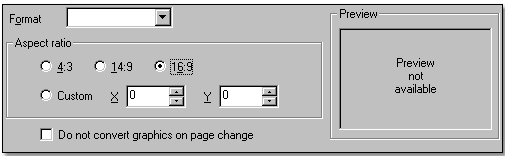
9.87.6.1 Aspect Ratio group box

The CG Tools software enables the definition of video aspect ratio on a page-by-page format using the standard 4:3, 14:9 and 16:9 formats 765 . You can also define custom aspect ratios 765 if you so choose.

SEE ALSO

Aspect ratios 548
Video standards and aspect ratios on a page-by-page basis 549

9.87.6.1.1 4:3, 14:9 and 16:9 radio buttons

To change the aspect ratio for the page or selected group of pages, follow the steps below:

• Select the aspect ratio using the 4:3, 14:9 and 16:9 radio buttons.

NOTE

If available, a preview of the page is shown, portraying how it will look when the conversion is complete.

SEE ALSO

Aspect ratios 548
Video standards and aspect ratios on a page-by-page basis 549

9.87.6.1.2 Custom radio button and X/Y increment boxes

To configure a custom aspect ratio for the page or selected group of pages, follow the steps below:

• Select the Custom option and then configure the X and Y increment boxes.

NOTE

If available, a preview of the page is shown, portraying how it will look when the conversion is complete.

9.87.6.2 Do not convert graphics on page change check box

To ensure that page elements are converted to a new video standard, follow the step below:

• Ensure that the Do not convert graphics on page change box is cleared.

SEE ALSO

Video standards 547
Aspect ratios 548
Video standards and aspect ratios on a page-by-page basis 549

765　　CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.87.6.3   Format drop-down list box

To change the video standard for the page or selected group of pages, follow the steps below:

- Select the video standard using the Format drop-down list box.

Depending on your selection, some or all of the Aspect Ratio and Custom controls within the Aspect Ratio group box 765 may become enabled.

SEE ALSO

Video standards 547
Video standards and aspect ratios on a page-by-page basis 549

9.87.7   Timecode dialog tab

When a job is to be controlled remotely in the Subtitle/Timeline page mode 244 or controlled internally in the Internal Timecode page mode, the timing for each page is overridden by the timecode controls configured for each page. All page wait and delay parameters are neglected when using the Subtitle/Timeline or Internal Timecode page modes.

To configure page timecode settings, follow the steps below:

- Select the Timecode dialog tab on the Page Settings dialog box 751. The Timecode dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
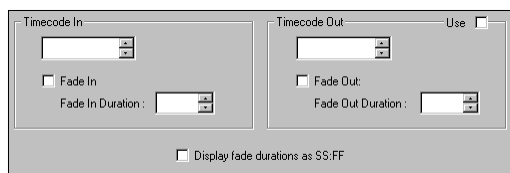
9.87.7.1   Display fade durations as SS:FF check box

If desired, you can specify a fade duration in seconds and frames (SS:FF) rather than seconds (SS). Check the Display SS:FF box to specify that fades are configured in second and frames.

9.87.7.2   Timecode In group box

The controls in the Timecode In group box enable the configuration of a timecode value and whether the page is faded in.

9.87.7.2.1   Fade In check box and Duration increment box

To specify that the fade in is applied to subtitle text when the page is taken, follow the step below:

- Check the Fade In box to specify that the fade in is applied to subtitle text when the page is taken. In the adjacent Fade In Duration increment box, type the fade duration in seconds and/or frames or use the increment and decrement buttons to jog the value up or down.

9.87.7.2.2   HH:MM:SS:FF increment box

The HH:MM:SS:FF increment box is used to define the timecode at which the transition into the page(s) will start. To set the in-time, follow the step below:

- In the Timecode In increment box, type the in-time in seconds and frames or use the increment and decrement buttons to jog the value up or down.

NOTE

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   766

Copyright © 2000-2006 Pixel Power Ltd.

Whilst operating in Subtitle/Timeline or Internal Timecode page mode, the in-time can also be configured for a page by double-clicking on the in-time for the selected page in the Page List [252].

9.87.7.3 Timecode Out group box

The controls in the Timecode In group box enable the configuration of a timecode value and whether the page is faded in.

9.87.7.3.1 Fade Out check box and Duration increment box

To specify that the fade out is applied to subtitle text when the next page is taken, follow the step below:

- Check the Fade Out box to specify that the fade out is applied to subtitle text when the next page is taken. In the adjacent Fade Out Duration increment box, type the fade duration in seconds and/or frames or use the increment and decrement buttons to jog the value up or down.

9.87.7.3.2 HH:MM:SS:FF increment box

The HH:MM:SS:FF increment box is used to define the timecode at which the transition into the page(s) will start. To set the in-time, follow the step below:

- In the Timecode In increment box, type the in-time in seconds and frames or use the increment and decrement buttons to jog the value up or down.

NOTE

Whilst operating in Subtitle/Timeline or Internal Timecode page mode, the in-time can also be configured for a page by double-clicking on the in-time for the selected page in the Page List [252].

9.87.7.3.3 Use check box

Check this box to enable the use an out timecode and thus the controls in the Timeout Out group box [767].

9.87.8 Transition dialog tab

To configure page transition settings, follow the steps below:

- Select the Transition dialog tab on the Page Settings dialog box [751]. The Transition dialog tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
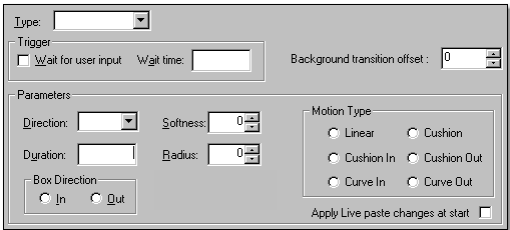
9.87.8.1 Background transition offset check box

If required, you can delay any background transition such that it occurs after some of the foreground animations have already started. As an example, this would enable you to effectively use a cel animation as a video wipe. To configure the background transition offset, follow the step below:

- In the Background transition offset increment box, type the offset duration in frames or use the increment and decrement buttons to jog the value up or down.

9.87.8.2 Parameters group box

The Parameters group box enables the configuration of how page transitions will look and respond. You can configure motion type 768, duration 768 and direction 768 and how transitions are triggered 769.

9.87.8.2.1 Apply Live paste changes at start check box

In situations where two pages each contain a pasted live object formatted with differing attributes, the software, by default, will apply the attributes of the second pasted live object after the page transition is complete.

For example, if there are two pages present with a squeezeback page transition configured on the first page, and each page contains a pasted live video object, but the pasted live video object on the first page is configured with live video source A and the second with live video source B, this option will determine whether the video source is swapped at the start or the end of the squeezeback page transition.

9.87.8.2.2 Box Direction group box

Select an inwards or outwards movement direction for the Box or Split Horizontal page transition using the controls in the Box Direction group box. The following settings are available:

In radio button

Select this option to apply an inwards movement to the page transition.

Out radio button

Select this option to apply an outwards movement to the page transition.

9.87.8.2.3 Direction drop-down list box

`(Left, Right, Down, Up)`

Select a direction for the page transition using the Direction drop-down list box.

9.87.8.2.4 Duration text box

`(SS:FF)`

Enter a duration in second and frames (SS:FF) for the page transition using the Duration text box.

9.87.8.2.5 Motion Type group box

Select a motion type for the page transition using the controls in the Motion Type group box. The following settings are available:

Liner radio button

Select this option to apply a uniform animation speed across the entire page transition.

Cushion radio button

Select this option to apply an animated cushion (accelerate and decelerate) to both the start and end of the page transition.

Cushion In radio button

Select this option to apply an animated cushion to ONLY the start of the page transition.

Cushion Out radio button

Select this option to apply an animated cushion to ONLY the end of the page transition.

Curve In radio button

Select this option to apply an inwards curve to the Squeezeback page transition.

Curve Out radio button

Select this option to apply an outwards curve to the Squeezeback page transition.

9.87.8.2.6   Radius increment box

`(0-600)`

Use this increment box to configure the radius in pixels of the page turn. Enter a value or use the increment and decrement buttons to jog the value up or down.

NOTE

The maximum radius available for a page turn depends on the direction and the duration of the page turn transition. If the radius is too large, the page turn will break up and not operate smoothly. If this occurs, reduce the radius or increase the duration. As a guide, for durations of 1 second or more a radius of at least 90 will operate correctly.

9.87.8.2.7   Softness increment box

`(0-640)`

Use this increment box to configure the number of pixels that are affected by the softness effect. Enter a value or use the increment and decrement buttons to jog the value up or down.

9.87.8.2.8   Trigger group box

Normally, the software waits for a GPI (Clarity only) or keyboard trigger before taking the next page; this can be disabled on a page by page basis using the Wait for user input check box.

When the Wait for user input check box is cleared, the adjacent Wait time text box is enabled. This text box can be used to define a duration since the last page transition start, including any foreground dynamics or animation. The software will wait until this duration has elapsed before starting the next transition.

Wait for user input check box

To wait for a trigger before the background transition starts, follow the step below:

- Check the Wait for user input box.

The software will wait for a Take key press before proceeding with the next transition when the page is replayed whilst online.

Wait time text box

To define a timed delay between page transitions, follow the step below:

- Ensure that the Wait for user input box is cleared.
- Using the Wait time text box, enter a delay as a time in seconds and frames.

Ensure that this delay is longer than the sum of the previous transition time, the foreground motion time, the time for any foreground animation or markers, and any page preparation times required for the page.

If the delay parameter is not large enough, the transition will occur as soon as possible.

NOTE

To remove any delay between page transitions, follow the steps below:

- Ensure that the Wait for user input box is cleared.
- Using the Wait time text box, enter a delay time of 0 seconds and frames.

The software will start the background page transition to the next page as soon as possible, after the foreground motion has completed.

9.87.8.3   Type drop-down list box

```
(Cut, Fade, Fade Through Black, Reveal, Push, Slide On, Slide Off, Box, Turn Off, Turn
On, Split Horizontal, Squeezeback)
```

To configure the transition type for the selected page(s), follow the step below:

- Select desired transition type from the Type drop-down list box.

SEE ALSO

9.88   Paste Audio Clip As dialog box

The Paste Audio Clip As dialog box enables the selection of how an audio clip copied from a Clarity clip drive is pasted to a local or network location.

To display the Paste Audio Clip As dialog box, follow the steps below:

1. Select File> [378] Clarity Explorer [382]. The Clarity Explorer [362] is displayed.
2. Browse to the audio clip on the Clarity clip drive that you want to copy.
3. Copy the clip using the shortcut menu [367] or Copy tool [365].
4. Browse to the local of network location where you want to paste the clip.
5. Paste the clip using the shortcut menu [367] or Paste tool [365]. The Paste Audio Clip As dialog box is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

9.88.1   Clarity Audio Clip File (.ppa) radio button

Clarity Audio Clip File (.ppa) option to paste the copied clip as an audio clip file with the .PPA extension.

9.88.2   Wave File (.wav) radio button

Clarity Wave File (.wav) option to paste the copied clip as an audio clip file with the .WAV extension.

9.89   Paste Video Clip As dialog box

The Paste Video Clip As dialog box enables the selection of how a video clip copied from a Clarity clip drive is pasted to a local or network location.

To display the Paste Video Clip As dialog box, follow the steps below:

1. Select File> [378] Clarity Explorer [382]. The Clarity Explorer [362] is displayed.
2. Browse to the video clip on the Clarity clip drive that you want to copy.
3. Copy the clip using the shortcut menu [367] or Copy tool [365].
4. Browse to the local of network location where you want to paste the clip.
5. Paste the clip using the shortcut menu [367] or Paste tool [365]. The Paste Video Clip As dialog box is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
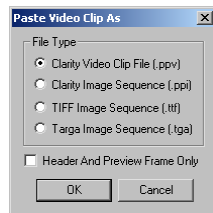
9.89.1 Clarity Image Sequence (.ppi) radio button

Select the Clarity Image Sequence (.ppi) option to paste the copied clip as a named sequence of Pixel Power Image files with the .PPI extension. With this option selected, you have the option to include the key channel |771| (if present in the video) in the resulting image sequence.

9.89.2 Clarity Video Clip File (.ppv) radio button

Select the Clarity Video Clip File (.ppv) option to paste the copied clip as video clip file with the .PPV extension. With this option selected, you have the option to copy the entire video clip or just the header and browse frame |771|.

9.89.3 Create Images With Key radio button

If you have selected to paste the copied video clip as an image sequence (.PPI, .TIFF or .TGA), select the Create Images With Key option to include the key (alpha) channel contained in each video frame in each image file in the resulting sequence.

9.89.4 Header And Preview Frame Only radio button

If you selected to paste the copied video clip as an .PPV video clip, check the Header And Preview Frame Only box to paste just the header information and preview frame for the clip, instead of the entire clip.

9.89.5 Targa Image Sequence (.tga) radio button

Select the Targa Image Sequence (.tga) option to paste the copied clip as a named sequence of Targa |1130| Image files with the .TGA extension. With this option selected, you have the option to include the key channel |771| (if present in the video) in the resulting image sequence.

9.89.6 TIFF Image Sequence (.ttf) radio button

Select the TIFF Image Sequence (.ttf) option to paste the copied clip as a named sequence of TIFF |1130| Image files with the .TTF extension. With this option selected, you have the option to include the key channel |771| (if present in the video) in the resulting image sequence.

9.90 Photoshop Connection Options dialog box

Enables the selection of whether YUV conversion methods are used by the Pixel Power Adobe Photoshop plug-in.

To display the Photoshop Connection Options dialog box, follow the step below:

- Select Options>Misc>Photoshop Connection |432|. The Photoshop Connection Options dialog box is displayed.
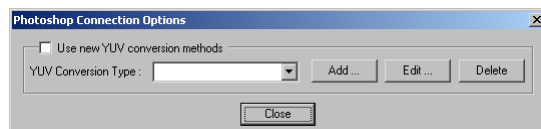
The following YUV to RGB conversion methods are available by default.

YUV Conversion Method	Description
`601 Matrix: Y(0-225)`	Use Rec.601 coefficients, keep full range [0,255].
`601 Matrix: Y(16-235)`	Use Rec.601 coefficients, scaled to TV range [16,235].
`709 Matrix: Y(0-225)`	Use PC.709 coefficients, keep full range [0,255].
`709 Matrix: Y(16-235)`	Use PC.709 coefficients, scaled to TV range [16,235].

9.90.1 Use new YUV conversion methods check box

Check the Use new YUV conversion methods check box to specify that you want to use available YUV conversion methods when exchanging image files between the Pixel Power Adobe Photoshop plug-in and the CG Tools software.

9.90.2 YUV Conversion Type drop-down list box

Select a defined YUV to RGB conversion method using the YUV Conversion Type drop-down list box.

9.90.3 Add button

Click on the Add button to add a new YUV to RGB conversion method. The YUV Conversion Settings dialog box ⌐826⌐ is displayed where you can edit method settings and add a new method to the list.

9.90.4 Edit button

Click on the Edit button to edit the YUV to RGB conversion method currently selected in the YUV Conversion Type drop-down list box ⌐772⌐. The YUV Conversion Settings dialog box ⌐826⌐ is displayed where you can edit method settings.

9.90.5 Delete button

Click on the Edit button to delete the YUV to RGB conversion method currently selected in the YUV Conversion Type drop-down list box ⌐772⌐.

9.91 Pick Server dialog box

The Pick Server dialog box is displayed after selecting the Copy button in the Job Path Configuration group box ⌐661⌐ on the Server Properties dialog sub-tab ⌐659⌐ on the Clarity Servers dialog tab ⌐655⌐. It enables the selection of an individual server from which the selected job paths can be copied to the current selected Clarity Server.
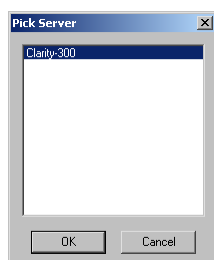
From those Clarity Servers shown in the list box, select the server that you want to copy the selected job path from using the mouse, then select OK to return to the Server Properties dialog sub-tab ⌐659⌐.

9.92 Potential Font Size Problem dialog box

The Potential Font Size Problem dialog box is displayed when opening jobs that use fonts that exhibit incorrect font size calculation. If the job was last saved with a version of the CG Tools software prior to v 4.7.1.0, you may need to take the remedial action, as described on the dialog box.
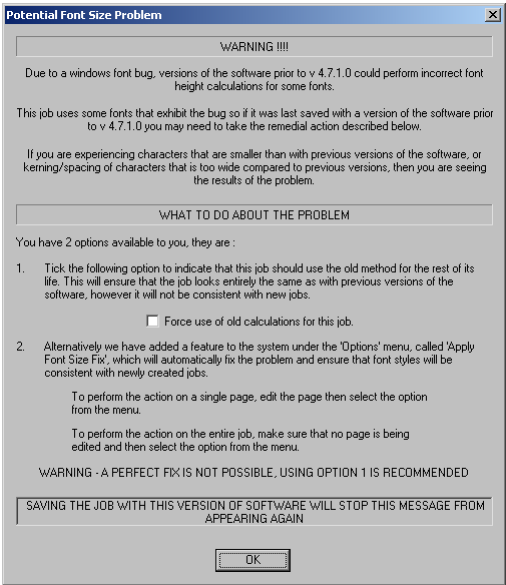
SEE ALSO

Options> [429] Misc>Apply Font Size Fix [432]

9.93 Properties dialog boxes (Clip Explorer)

Variations of the Properties dialog box are displayed when working with files within the Clarity Explorer [362]. Properties can be displayed for video clips [775], audio clips [773], miscellaneous files [778] and clip volumes [778].

9.93.1 Clip Properties dialog box (Audio)

To display the Clip Properties dialog box for an audio clip, select the clip in the Clarity Explorer [362], right-click and then select Properties from the shortcut menu [367] that appears.

The Clip Properties (Audio) dialog box contains two dialog tabs. The purpose of each tab is explained below:

Tab	Enables configuration/viewing of
General [774]	Audio clip properties including location, size and length etc.
Trim [774]	Audio clip preview frame and head/tail configuration.

9.93.1.1   General dialog tab

To view general information about the selected audio clip, follow the steps below:

- Select the General dialog tab on the <u>Clip Properties (Audio) dialog box</u> 773. The General dialog tab appears.
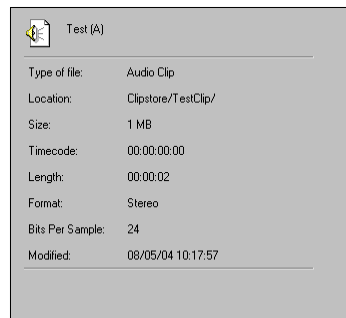
Entry	Description	Variables
Type of file	Identifies the type of clip.	`Audio Clip`
Location	Location on clip store.	`<ClipStore/Path>`
Size	Physical size in MB.	`<Size> MB`
Timecode	Timecode stamp.	`HH:MM:SS:FF`
Length	Length of the audio clip in time and frames	`HH:MM:SS:FF; # of frames`
Format	Audio format in which the clip was recorded in.	`Stereo; Mono`
Bits Per Sample	Audio sampling rate of the clip in bits.	`16; 24`
Modified	When the audio clip was last modified.	`dd/mm/yy; hh/mm/ss`

9.93.1.2   Trim dialog tab

To edit the playback range of the selected audio clip, follow the steps below:

- Select the Trim dialog tab on the <u>Clip Properties (Audio) dialog box</u> 773. The Trim dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
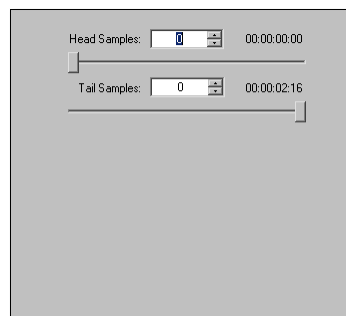
9.93.1.2.1 Head Samples increment box and slider bar

Use this increment box to configure the starting sample within the selected video clip. The is useful in situations where you need to trim excess audio from the start of the clip that is not required. When the clip is subsequently set as a page background, the system will automatically read the head point from the clip so that it starts from the defined frame automatically.

Enter a value in frames or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the related slider bar.

9.93.1.2.2 Tail Samples increment box and slider bar

Use this increment box to configure the ending sample within the selected audio clip. The is useful in situations where you need to trim excess audio from the end of the clip that is not required. When the clip is subsequently set as a page background, the system will automatically read the tail point from the clip so that it starts from the defined frame automatically.

Enter a value in frames or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the related slider bar.

9.93.2 Clip Propeties dialog box (Video)

To display the Clip Properties dialog box for a video clip, select the clip in the Clarity Explorer 362, right-click and then select Properties from the shortcut menu 367 that appears. New or edited sections since the last release are highlighted with dark grey shading.

The Clip Properties (Video) dialog box contains four dialog tabs. The purpose of each tab is explained below:

Tab	Enables configuration/viewing of
A1/A2/A3/A4 775	Associated audio clip(s) including source, starting point and gain.
General 777	Video clip properties including location, size and length etc.
Trim 777	Video clip preview frame and head/tail configuration.

9.93.2.1 A1/A2/A3/A4 dialog tab

To select which audio tracks to configure, follow the steps below:

- On the Clip Properties (Video) dialog box 775, select either the A1/A2 tab to configure audio for the first stereo pair or the A3/A4 tab to configure audio for the second stereo pair. Both dialog tabs have identical user interface features.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

775   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
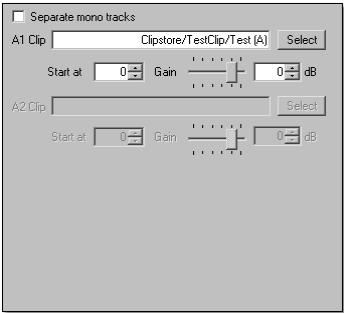
9.93.2.1.1　(A1/A2/A3/A4) Clip text box

Enter the file path of the audio clip that you want to use in this text box. Alternatively, select the Select [753] button to browse local or remote clip stores.

When configuring associated audio clip(s) for a selected video clip, the folder containing the video clip is used as the search path for the audio clip(s). This enables the associated audio clip fields specified using the A1/A2/A3/A4 Clip text boxes to contain just the name of the audio clip file (instead of the full file path). As long as the video and associated audio clips are in the same folder, the audio associations will work. They can also then be copied to a folder on another clip drive and the audio associations will still be valid.

NOTE

Only the A1 or A3 clip text boxes and related Select buttons [753] will be available unless the Separate mono tracks box [753] is checked. See Page background audio [443] for more information.

SEE ALSO

Separate mono tracks check box [753]

9.93.2.1.2　Gain slider annd increment box

```
(-48db - +12db)
```

Use this slider bar to adjust the gain level of the designated clip. Alternatively, enter a value in db in the increment box or use the increment and decrement buttons to jog the value up or down.

9.93.2.1.3　Select button

Click on the Select button to browse local or remote clips stores for your desired audio clip. The Clarity Explorer [362] is displayed.

NOTE

Only the A1 or A3 Select buttons will be available unless the Separate mono tracks box [753] is checked. See Page background audio [443] for more information.

9.93.2.1.4　Separate mono tracks check box

Select Separate mono tracks check box if you want to specify separate mono tracks. You will have to specify two audio clips instead of a single clip. The A2 or A4 Clip text box will become enabled, enabling you to select a separate additional audio clip.

9.93.2.1.5　Start at frame increment box

Use this increment box to configure the starting point within the designated audio clip. Enter a value in frames or use the increment and decrement buttons to jog the value up or down.

9.93.2.2   General dialog tab

To view general information about the selected video clip, follow the steps below:

- Select the General dialog tab on the Clip Properties (Video) dialog box ⌐775¬. The General dialog tab appears.
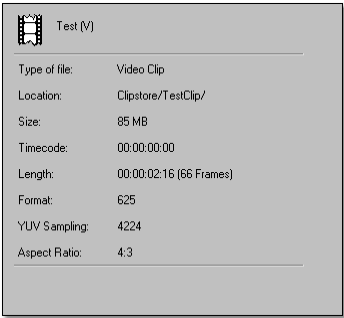
Entry	Description	Variables
Type of file	Identifies the type of clip.	`Video Clip`
Location	Location on clip store.	`<ClipStore/Path>`
Size	Physical size in MB.	`<Size> MB`
Timecode	Timecode stamp.	`HH:MM:SS:FF`
Length	Length of the video clip in time and frames.	`HH:MM:SS:FF; # of frames`
Format	Video format in which the clip was recorded in.	`625 (PAL); 525 (NTSC)`
YUV Sampling	Video sampling of the clip.	`4224;4444`
Aspect Ratio	Aspect ratio of the video clip if available.	`4:3; 16:9`

9.93.2.3   Trim dialog tab

To edit the playback range of the selected video clip, follow the steps below:

- Select the Trim dialog tab on the Clip Properties (Video) dialog box ⌐775¬. The Trim dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
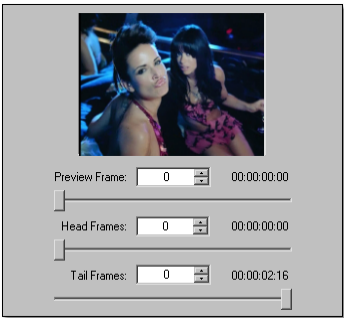
9.93.2.3.1   Head Frame increment box and slider bar

Use this increment box to configure the starting frame within the selected video clip. The is useful in situations where you need to trim excess video from the start of the clip that is not required. When the clip is subsequently set as a page background, the system will automatically read the head point from the clip so that it starts from the defined frame automatically.

Enter a value in frames or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the related slider bar.

9.93.2.3.2   Preview Frame increment box and slider bar

Use this increment box to configure the preview frame for selected video clip. This is shown when the video clip is viewed as a thumbnail within the Clarity Explorer.

Enter a value in frames or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the related slider bar.

Notice that the frame shown by the Preview window 778 will change to match the specified frame.

9.93.2.3.3   Preview window

Previews the preview frame for the selected clip as defined using the Preview Frame increment box 778 or related slider bar

9.93.2.3.4   Tail Frame increment box and slider bar

Use this increment box to configure the ending frame within the selected video clip. The is useful in situations where you need to trim excess video from the end of the clip that is not required. When the clip is subsequently set as a page background, the system will automatically read the tail point from the clip so that it starts from the defined frame automatically.

Enter a value in frames or use the increment and decrement buttons to jog the value up or down. This value can also be configured interactively using the related slider bar.

9.93.3   File Propeties dialog box

For file types other then video or audio clips, this dialog box is displayed detailing relevant file information.

Entry	Description	Variables
Type of file	Identifies the type of file.	`Any file type known to CG Tools`
Location	Location on drive/network location/clip store.	`<Volume/Path>`
Size	Physical size in MB.	`<Size> MB`
Modified	When the file was last modified.	`dd/mm/yy; hh/mm/ss`

9.93.4   Volume Properties dialog box

To display the Volume Properties dialog box for a clip volume, select the volume in the Clarity Explorer 362, right-click and then select Properties from the shortcut menu 367 that appears.

The Volume Properties dialog box contains two dialog tabs. The purpose of each tab is explained below:

Tab	Enables
General 779	Viewing of selected clip volume properties.
Tools 779	Error checking of selected clip volume.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   778

Copyright © 2000-2006 Pixel Power Ltd.

9.93.4.1   General dialog tab

The General dialog tab displays information about the selected local clip volume. It displays both used and free space available (both textually and graphically) and also displays the number of 525 and 625 line video frames that are contained on the volume.
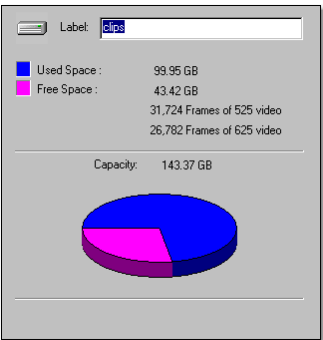
9.93.4.2   Tools dialog tab

The Tools dialog tab enables you to perform actions on the selected clip volume.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
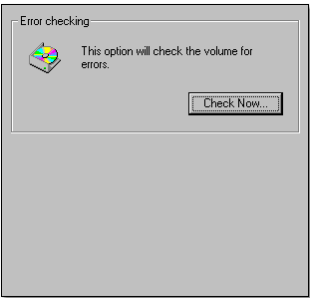
9.93.4.2.1   Error Checking group box

Select Check Now to perform an error check of the selected clip volume.

779   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.94 Recompile Cel Animation From Picture dialog box

To display the Recompile Cel Animation From Picture dialog box where a cel animation can be re-compiled, follow the steps below:

- Select Recompile on the Cel control set [303] on the Graphic Tools [266]. The Recompile Cel Animation From Picture dialog box is displayed.
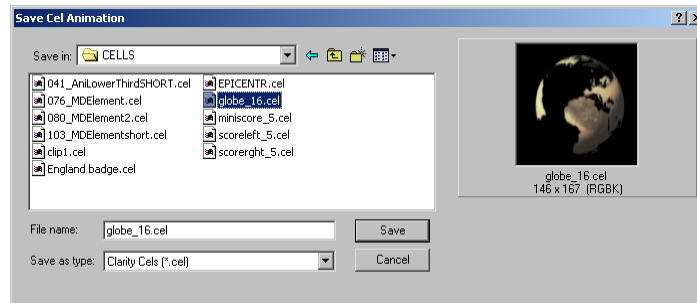
1. Browse to location where the revised image sequence is located.
2. Select the first image in the sequence.
3. Select Open to re-load the sequence and return to the application.

9.95 Remote Connection dialog box

The Remote Connection dialog box is displayed when the CG Tools software tries to access a file on a remote system or PC via DCOM or ODBC. This may occur when opening a job containing global fields that are linked to a data source e.g Excel workbook on a remote system or PC.
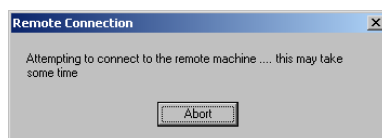
SEE ALSO

Global Fields Manager [333]
Field Data Connection Settings (Data) [281]

9.96 Rendering Smart Moves dialog box

Enables the progress monitoring of Smart Move rendering. When you attempt to go online after inserting a new Smart Move animation marker or after re-configuring an existing Smart Move animation marker, the CG Tools software will detect that the move needs to be rendered and will then start rendering. The Rendering Smart Moves dialog box is displayed on these occasions and Smart Move rendering must complete before page playout can proceed.
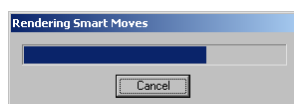
SEE ALSO

See the Caching dialog tab [707] on the Local Preferences dialog box [696] for more information on the Smart Move rendering folder.

9.97 Save As (Generic) dialog box

The generic Save As dialog box is displayed when general file saving is required. Usually launched from a parent dialog box.
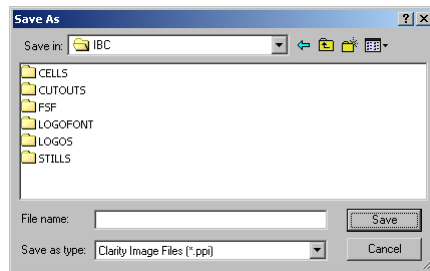
1. To display files of all types, select All Files from the Files of Type drop-down list box.
2. Browse to a new location or where an existing file is located.
3. Select the desired file or enter a new name in the File name text box.
4. Select Save to save and return to the application or launching dialog box.

9.98 Save Background Image dialog box

To display the Save Background Image dialog box where a page background can be saved, follow the steps below:

- Select Background> [419] Save Background [420]. The Save Background Image dialog box is displayed.
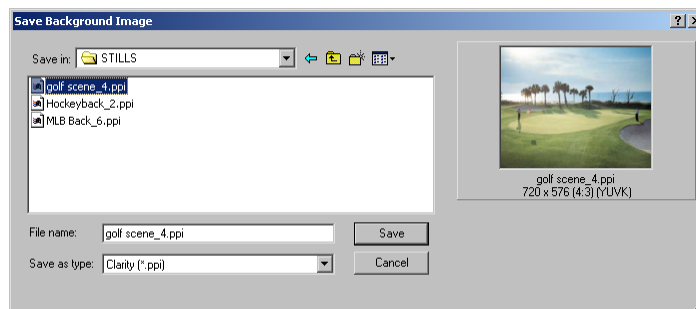
1. Select the desired file type from the Files of Type drop-down list box.
2. Browse to a new location or where an image file is located.
3. Select the desired image file or enter a new name in the File name text box.
4. Select Save to save the background image and return to the application or launching dialog box.

9.99 Save Clarity Job dialog box

To display the Save Clarity Job dialog box where a job can be saved, follow the steps below:

- Select either File> [378] Save Job [380] if the current job is unsaved or File> [378] Save Job As [380] to save a previously saved job with a new name. The Save Clarity Job dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
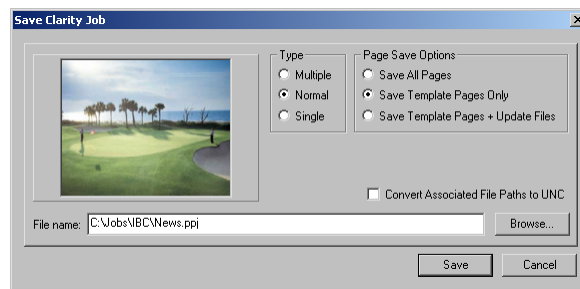
9.99.1 Convert Associated File Paths To UNC check box

Check the Convert Path To UNC box to convert Windows network file paths contained within the job to Universal Naming Convention (UNC) paths.

e.g. `C:\DEMOPIC\NEWS` is converted to `\\<machinename>\C$\DEMOPIC\NEWS`

9.99.2 Filename text box and browse button

Enter the file path in the Filename text box of the job file that you want to save or select the Browse button and browse for the desired location and job file. If the browse button is selected, the Save Job dialog box appears where you can browse and select the desired job file.
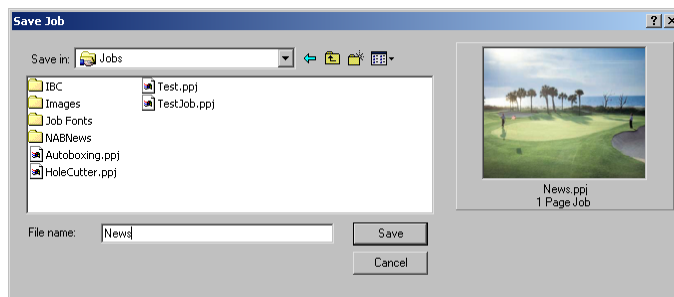
9.99.3 Page Save Options group box

Enables the selection of what is saved with the job (all pages 782, just template page 782 or template pages AND page update files 782).

9.99.3.1 Save All Pages radio button

Select this option to save all pages in the current job. This is the default selection.

9.99.3.2 Save Template Pages + Update Files radio button

Select this option to save template pages in the current job PLUS any update files created from pages based on template pages. Pages can be marked as template pages using the check box in the Timecode column in the Page List 252 or by selecting Page> 390 Template 394.

9.99.3.3 Save Template Pages Only radio button

Select this option to save only template pages in the current job. Pages can be marked as template pages using the check box in the Timecode column in the Page List 252 or by selecting Page> 390 Template 394.

9.99.4   Preview window

Displays a preview of the first page contained in the job.

9.99.5   Type group box

Enables the selection of a job type (Normal ⌐783⌐, Multiple ⌐783⌐ or Single ⌐783⌐).

SEE ALSO

Job types ⌐500⌐

9.99.5.1   Multiple radio button

Select this option to save the job as a multiple job ⌐501⌐.

9.99.5.2   Normal radio button

Select this option to save the job as a normal job ⌐501⌐.

9.99.5.3   Single radio button

Select this option to save the job as a single page job ⌐502⌐.

9.100   Save Cel Animation dialog box

To display the Save Cel Animation dialog box where a cel animation can compiled, follow the steps below:

- Select Compile on the Cel control set ⌐303⌐ on the Graphic Tools ⌐266⌐. The Save Cel Animation dialog box is displayed.
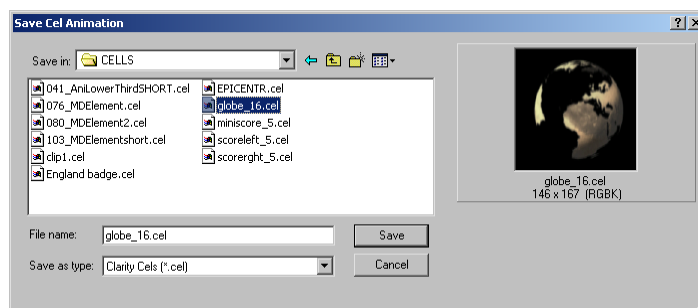
1. Browse to a new location or where an existing cel animation is located.
2. Select the desired cel animation or enter a new name in the File name text box.
3. Select Save to compile the cel animation and return to the application.

9.101   Save Image Options dialog box

The Save Image Options dialog box is displayed in circumstances where you are saving Pixel Power Image (.PPI) images or Video Paint Box Format (Quantel) (.VPB) images from the CG Tools software. For example, when saving the background layer of a page to an image using Background> ⌐419⌐Save Background ⌐420⌐. After selecting the .PPI or .VPB file format on the Save Background Image dialog box ⌐781⌐ and selecting OK, the Save Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

783   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
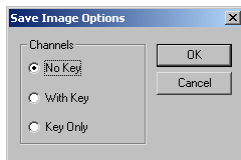
9.101.1 Channels group box

Select whether to save the .PPI or .VPB image <u>with</u> [806] or <u>without</u> [806] its key/alpha channel.

9.101.1.1 No Key radio button

Select the No Key option to omit the key/alpha channel from the saved .PPI or .VPB image.

9.101.1.2 With Key radio button

Select the With Key option to include the key/alpha channel with the saved .PPI or .VPB image.

9.101.1.3 Key only radio button

Select the Key Only option to include JUST the key/alpha channel in the saved .PPI or .VPB image.

9.102 Save Stack As dialog box

To display the Save Stack As dialog box where a <u>Page Stack</u> [325] can be saved, follow the steps below:

- Select either <u>File></u> [378] <u>Save Stack</u> [380] if the current page stack is unsaved or <u>File></u> [378] <u>Save Stack As</u> [381] to save a previously saved page stack with a new name. The Save Stack As dialog box is displayed.
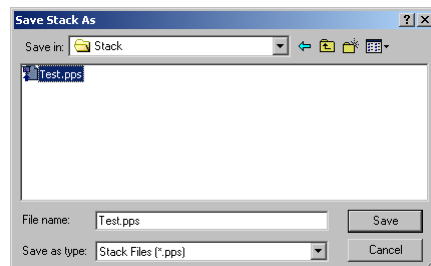
1. Browse to a new location or where an existing page stack is located.
2. Select the desired page stack or enter a new name in the File name text box.
3. Select Save to save the page stack and return to the application.

9.103 Save Still dialog box

To display the Save Still dialog box, follow the steps below:

- Select <u>Background></u> [419] <u>Save Background As Still</u> [420]. The Save Still dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
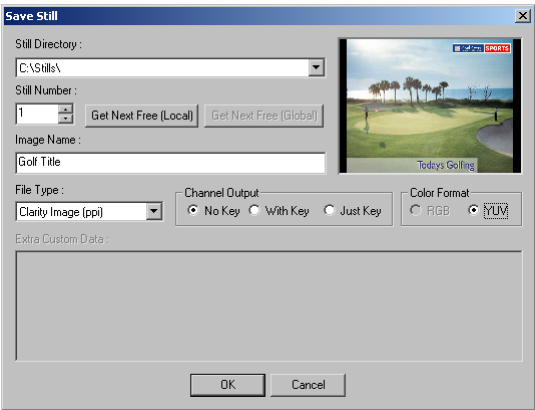
9.103.1 Channel Output group box

Enables the selection of how the key or matte associated with the still image is saved (with the key ⌐785¬, without the key ⌐785¬ or just the key ⌐785¬).

9.103.1.1 Just Key radio button

Select the Just Key option to include just the key with the saved still image.

9.103.1.2 No Key radio button

Select the No Key option to omit the key from the saved still image.

9.103.1.3 With Key radio button

Select the With Key option to include the key with the saved still image.

9.103.2 Color Format group box

To specify what colour model the image is saved in, select either the YUV or RGB option.

9.103.3 Extra Custom Data group box

Functionality not yet available.

<PAW>

9.103.4 File Type drop-down list box

The File Type list box enables you to select the file type of still image that you want to output to. Select the file format that you want to save, depending on your requirements.

File Format	Type	Extension	Configuration Available				
			RGB ⌐635¬	YUV ⌐635¬	No Key ⌐637¬	With Key ⌐637¬	Just Key ⌐637¬
Clarity Image Format	Image	.PPI		■	■	■	■
Collage Image Format	Image	(check sum)	■		■	■	

Tagged Image File Format	Image	.TIFF	■		■	■	
Targa Bitmap	Image	.TGA	■		■	■	
Windows Bitmap	Image	.BMP	■		■	■	
JPEG Bitmap	Image	.JPG	■		■	■	
SGI Targa Bitmap	Image	.TGA	■		■	■	
VPB Quantel Bitmap	Image	.VPB		■	■	■	

9.103.5 Get Next Free (Global) button

Select the Get Next Still (Local) button to search ALL listed defined still directories for the next available still number. Still directories are configured on the Still Store dialog tab 730 on the Local Preferences dialog box 696.

9.103.6 Get Next Free (Local) button

Select the Get Next Still (Local) button to search the currently defined still directory for the next available still number. The current still directory is configured on the Still Store dialog tab 730 on the Local Preferences dialog box 696.

9.103.7 Image Name text box

Enter a name for the saved still image using the Image Name text box.

9.103.8 Preview window

Displays a preview of the still image.

9.103.9 Still Directory drop-down list box

Select the directory where you want to save the still image using the Still Directory drop-down list box. Available still directories are configured on the Still Store dialog tab 730 on the Local Preferences dialog box 696.

9.103.10 Still Number increment box

Select the still number for the still image using the Still Number increment box. Alternatively, select the Get Next Free (Global) button 786 or Get Next Free (Local) button 786 to get the next still number automatically.

9.104 SD Hardware Configuration [CLARITY] [SD] dialog box

To display the SD Hardware Configuration dialog box where SD hardware configuration can be achieved, follow the steps below:

- Select Options> 429 Hardware>SD Settings 431. The SD Hardware Configuration dialog box appears.

The SD Hardware Configuration dialog box contains four dialog tabs per channel. New or edited dialog tabs since the

last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of
Auxiliary A/B dialog tab [787]	Preview video options for channel A/B.
Blanking A/B dialog tab [789]	Video line blanking options for channel A/B.
Chan A/B dialog tab [790]	Video options for channel A/B.
DSK A/B dialog tab [792]	DSK (Down Stream Keyer) options for channel A/B.

The System Settings group box [794] enables configuration of system wide settings for channel A/B.

NOTES

- If your chosen Clarity system supports only a single channel of SD video, then only the A suffixed dialog tabs will appear.
- Some settings can only be configured when a job is not open (e.g. Video Format [795]) and require you to re-start the Clarity software before they take effect.
- Where rear panel connectors are referenced, Clarity 500 system unit rear panel connectors are listed and/or shown.

9.104.1   Auxiliary A/B dialog tab

To configure preview options for channel A/B, follow the steps below:

- Select the Auxiliary A or Auxiliary B dialog tab on the SD Hardware Configuration dialog box. The Auxiliary A or Auxiliary B dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
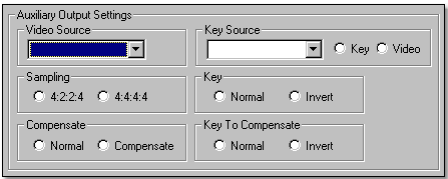
9.104.1.1   Auxiliary Output Settings group box

9.104.1.1.1   Compensate group box

Normal radio button

When selected, the channels' output video is passed directly to the output connector. The video and key signal generated are suitable for non-additive mixing downstream if the anti-aliasing quality (for example smooth character edges) is to be preserved.

Compensate radio button

When selected, the channels' output video is adjusted based on the output key signal so that the output video and key can be used with a multiplicative mixing down stream keyer and anti-aliasing quality (for example smooth character edges) will be preserved.

9.104.1.1.2   Key group box

Normal radio button

When selected, the key from the selected source will be sent directly to the key output connector. A key signal of black means no foreground video and a key signal of peak white means full on foreground video. Intermediate key values determine the transparency of the foreground layer.

Invert radio button

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

When selected, the key output from the selected source will be inverted before being sent to the key output connector.

Compensate radio button

When selected, the preview output video is adjusted based on the preview key signal so that the preview video and key can be used with a multiplicative mixing down stream keyer and anti-aliasing quality (for example smooth character edges) will be preserved.

9.104.1.1.3   Key Source group box

Key Source drop-down list box

```
(Channel 1 CG, Channel 2 CG, DSK A, DSK B, Live A, Live B, Chan. 3/Preview 1, Chan.
4/Preview 2)
```

This control enables the source for the serial digital preview key out connector to be specified. The key from the CG layer before the DSK (Channel 1 CG, Channel 2 CG), the DSK output (DSK A, DSK B), the Live inputs (Live A, Live B) or the preview channels (Chan. 3/Preview 1, Chan. 4/Preview 2) can be selected.

Video radio button

When selected, the AUX KEY A or AUX KEY B output BNC connector on the rear panel carries a video signal rather than a key signal from the source selected in the Key Source drop-down list box.

Key radio button

When selected, the AUX KEY A or AUX KEY B output BNC connector carries a key signal from the source selected in the Video Source drop down list box.

NOTE

Preview channel functionality may not be available on some system configurations.

9.104.1.1.4   Key to Compensate group box

Normal button

When selected, the key signal is passed directly to the compensation processing stage. This option should normally be selected. This control is ignored unless compensation is enabled.

Invert radio button

When selected, the key signal has its sense inverted before being passed to the compensation processing stage. This control is ignored unless compensation is enabled.

9.104.1.1.5   Sampling group box

Only available for configuration when the Key option is selected in the Key Source group box 788 .

4:2:2:4 radio button

When selected, specifies that the output sampling will be 4:2:2:4. The key output for the channel will carry the key signal on the Y component only.

4:4:4:4 radio button

When selected, specifies that the output sampling will be 4:4:4:4. The key output carries the key signal on the Y component and the non co-sited UV samples from the video output. If this option is selected, the outputs operate in dual link mode, where the key output will seem to have a chroma component if viewed on a suitable SDI monitor.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   788

Copyright © 2000-2006 Pixel Power Ltd.

9.104.1.1.6   Video Source drop-down list box

```
Channel 1 CG, Channel 2 CG, DSK A, DSK B, Live A, Live B, Chan. 3/Preview 1, Chan.
4/Preview 2)
```

This control enables the source for the serial digital preview video out connector to be specified. The video from the CG layer before the DSK (Channel 1 CG, Channel 2 CG), the DSK output (DSK A, DSK B), the Live inputs (Live A, Live B) or the preview channels (Chan. 3/Preview 1, Chan. 4/Preview 2) can be selected.

NOTE

Preview channel functionality may not be available on some system configurations.

9.104.2   Blanking A/B dialog tab

Because line 23 (PAL) is sometimes used for e.g widescreen switching, it was recognised as being optional to pass this line through, and equivalent line(s) in NTSC. This applies optionally to either program Video (V) or Key (K) and auxiliary Video (V) or Key (K).

It is important to note this dialog tab and in particular the blanking line list will appear differently to that shown, depending on the video standard currently configured (PAL or NTSC).

To configure video line blanking options for channel A/B, follow the steps below:

- Select the Blanking A or Blanking B dialog tab on the SD Hardware Configuration dialog box. The Blanking A or Blanking B dialog tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
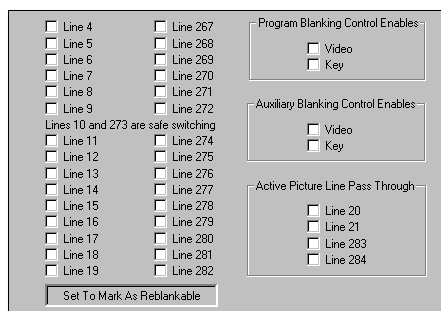
525 line version shown above (NTSC).

9.104.2.1   Active Picture Line Pass Through group box

Select whether you want the system to pass a selected active line through untouched using the available check boxes in the Active Picture Line Pass Through group box. For example, in PAL, the first half of line 23 is used to carry aspect ratio information about the picture for systems able to display wide screen images.

9.104.2.2   Auxiliary Blanking Control Enables group box

Select whether the re-blanking of selected lines applies to auxiliary video outputs using the Video and Key check boxes in the Auxiliary Blanking Control Enables group box.

9.104.2.3   Blanking Line check boxes

Select the desired non-active lines that you want to blank using the available check boxes on the left side of the dialog tab.

9.104.2.4   Program Blanking Control Enables group box

Select whether the re-blanking of selected lines applies to program video outputs using the Video and Key check boxes in the Program Blanking Control Enables group box.

9.104.3   Chan A/B dialog tab

To configure video options for channel A/B, follow the steps below:

- Select the Chan A or Chan B dialog tab on the SD Hardware Configuration dialog box. The Chan A or Chan B dialog tab appears.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
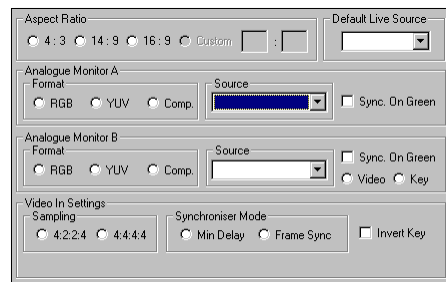
9.104.3.1   Analogue Monitor A/B group boxes

9.104.3.1.1   Format group box

RGB radio button

When selected, the channels' analog output (A or B) is configured for RGB operation.

YUV radio button

When selected, the channels' analog output (A or B) is configured for YUV operation.

Comp. radio button

When selected, the channels' analog output (A or B) is configured for composite/S-Video operation.

9.104.3.1.2   Key radio button (B only)

When this option is selected, the B analog monitoring output displays the key signal from the video source selected for the A monitoring output. The list box for the B source is greyed out and shows the same source name as the A output control. When the output is configured for YUV then the key signal is present on the Y output; in RGB the key signal is present on all of the colour component outputs.

9.104.3.1.3   Source drop-down list box

```
(Channel 1 CG, Channel 2 CG, DSK A, DSK B, Live A, Live B, Chan. 3/Preview 1, Chan.
4/Preview 2)
```

This control enables the video source to be selected for the monitoring output.

The CG layer before the DSK (Channel 1 CG, Channel 2 CG), the DSK output (DSK A, DSK B), the Live inputs (Live A, Live B) or the preview channels (Chan. 3/Preview 1, Chan. 4/Preview 2) from either Clarity channel can be selected.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   790

Copyright © 2000-2006 Pixel Power Ltd.

9.104.3.1.4   Sync. On Green check box

When selected, the green or Y output (depending on analog monitor format selection) will have composite sync enabled.

9.104.3.1.5   Video radio button (B only)

When selected, the B analog monitoring output displays an independent video source from the A analog output.

9.104.3.2   Aspect Ratio group box

Depending on your video format selection, some or all of the Aspect Ratio and Custom controls may become enabled. Select 4:3, 14:9 or 16:9 to select the desired aspect ratio. If you want to configure a custom aspect ratio, select Custom and then configure the adjacent text boxes.

9.104.3.3   Default Live Source drop-down list box

```
(Live A, Live B)
```

This control is used to select which digital input video source is selected by default for video squeeze backs on the channel.

9.104.3.4   Video In Settings group box

9.104.3.4.1   Invert key check box

When selected, enables the input key signal to be inverted prior to processing by the system. A key of black will be treated as full on and a key of peak white will be treated as off.

9.104.3.4.2   Sampling group box

4:2:2:4 radio button

When selected, enables 4:2:2:4 video sampling from the serial digital video and key inputs. Internal processing is carried out in 4:4:4:4 space; the system interpolates the input from 4:2:2:4 to 4:4:4:4 before processing.

4:4:4:4 radio button

When selected, enables 4:4:4:4 video sampling from the serial digital video and key inputs. The two inputs are used together configured in dual link mode with the non co-sited UV samples encoded with the key input.

9.104.3.4.3   Synchroniser mode group box

Controls the delay characteristics of the input video and audio frame buffer.

Min delay radio button

When selected, the delay through the system is kept to an absolute minimum. The input to the frame buffer must arrive at least two lines early compared to the system output timing and can be up to a frame less 2 lines early.

Frame sync radio button

When selected, the input is re-synchronised to the output timing which is defined by the genlock settings (but is normally co-timed with the reference). The input can be up to half a frame early or late. The video and key inputs are synchronised independently.

9.104.4 DSK A/B dialog tab

To configure DSK (Down Stream Keyer) options for channel A/B, follow the steps below:

- Select the DSK A or DSK B dialog tab on the SD Hardware Configuration dialog box. The DSK A or DSK B dialog tab appears.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
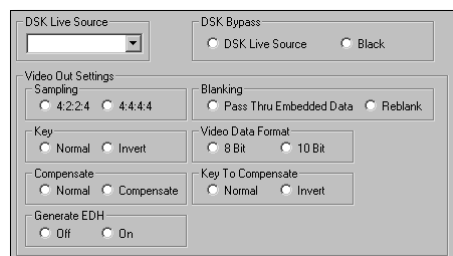
9.104.4.1 DSK Live Source drop-down list box

`(Live A, Live B)`

This control enables the live source for down stream keyer (DSK) to be specified. Live input A or B can be selected.

9.104.4.2 DSK Bypass group box

Enables the selection of whether the underlined selected live source [792] or black [792] is output from the down stream keyer (DSK).

9.104.4.2.1 DSK Live Source radio button

When selected, the live source selected using the DSK Live Source drop-down list box [792] is output from the down stream keyer (DSK).

9.104.4.2.2 Black radio button

When selected, black is output from the down stream keyer (DSK).

9.104.4.3 Video Out Settings group box

9.104.4.3.1 Blanking group box

Pass Thru Embedded Data radio button

When selected, allows embedded data (audio and control information) on the input live source to the DSK to be forwarded to the output.

Reblank radio button

When selected, removes embedded data (audio and control information) on the input live source to the DSK from the output.

9.104.4.3.2 Compensate group box

Normal radio button

When selected, the channels' output video is passed directly to the output connector. The video and key signal generated are suitable for non-additive mixing downstream if the anti-aliasing quality (for example smooth character edges) is to be preserved.

Compensate radio button

When selected, the channels' output video is adjusted based on the output key signal so that the output video and key can be used with a multiplicative mixing down stream keyer and anti-aliasing quality (for example smooth character edges) will be preserved.

9.104.4.3.3   Generate EDH group box

Off radio button

When selected, EDH (*Error Detection and Handling*) packets will NOT be included in the video and key outputs.

On radio button

When selected, EDH packets will be included in the video and key outputs.

9.104.4.3.4   Key group box

Normal radio button

When selected, the key output from the DSK will be sent directly to the key output connector. A key signal of black means no foreground video and a key signal of peak white means full on foreground video. Intermediate key values determine the transparency of the foreground layer.

Invert radio button

When selected, the key output from the DSK will be inverted before being sent to the key output connector.

9.104.4.3.5   Key to Compensate group box

Normal button

When selected, the key signal is passed directly to the compensation processing stage. This option should normally be selected. This control is ignored unless compensation is enabled.

Invert radio button

When selected, the key signal has its sense inverted before being passed to the compensation processing stage. This control is ignored unless compensation is enabled.

9.104.4.3.6   Sampling group box

4:2:2:4 radio button

When selected, specifies that the output sampling will be 4:2:2:4. The key output for the channel will carry the key signal on the Y component only.

4:4:4:4 radio button

When selected, specifies that the output sampling will be 4:4:4:4. The key output carries the key signal on the Y component and the non co-sited UV samples from the video output. If this option is selected the outputs operate in dual link mode where the key output will seem to have a chroma component if viewed on a suitable SDI monitor.

9.104.4.3.7   Video Data Format group box

8-Bit radio button

When selected, DSK output data is rounded/dithered to 8-bits precision.

10-Bit radio button

When selected, DSK output data is maintained to 10-bits precision.

9.104.5 System Settings group box

To configure system wide video settings for channel A/B, use the controls on the System Settings group box.

• To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
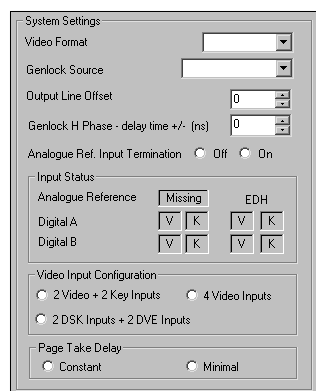
9.104.5.1 Analogue Ref. Input Termination On and Off radio buttons

Determines the terminator for the analog timing reference into the system. If On is selected, then the input is terminated with 75 Ohms and the analog LOOP loop-through BNC on the rear of the system unit should not be used.

When Off is selected, the input is not terminated and the analog LOOP loop-through BNC connector on the rear of the system unit can be used and the reference should be terminated externally.

9.104.5.2 Genlock H Phase delay time +/- (ns) increment box

`(+/- n ns)`

Enables the horizontal position of the output video scan timing to be offset from the reference scan timing in units of a nano-second. To configure the offset to be earlier, enter a negative number of nano-seconds. To configure the offset to be later, enter a positive number of nano-seconds.

9.104.5.3 Genlock Source drop-down list box

`(Freerun, Analogue Ref, Digital A Video, Digital B Video)`

Systems can free run (ignore any input reference), lock to the analog reference input or lock to either of the serial digital video inputs. Once locked, the system is co-timed with the reference unless a timing offset has been specified using the Genlock H Phase 794 and/or Output Line Offset 795 increment boxes.

9.104.5.4 Input Status group box

Enables the status monitoring of the video input.

9.104.5.4.1 Analogue Reference status box

`(Present, Missing)`

Displays the status of the supplied analog reference (either present or missing). It should be noted that this indicator does not discriminate between 525 and 625 video standards and is active independently of the selected genlock source.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   794

Copyright © 2000-2006 Pixel Power Ltd.

9.104.5.4.2   Digital A Video/Key coloured status matrix

Displays the status of the digital video and key inputs for channel A.

The left two status boxes will be green when a valid video (V) and key signal (K) are present. If no signal is recognised, then the status boxes will be grey.

The right two status boxes show the status of EDH (Error Detection and Handling) packets for the video (V) and key signal (K). If a box is grey, then either EDH is not present on the input or the input is not valid. If a status box is green, a valid EDH is being received. If a status box is red, then an EDH error has been detected. The error can be either an active picture error or a full field error. These status indicators discriminate between 625 and 525 line timing.

When the system is configured for 525 line operation (for example) and a 625 line digital input is connected, the status boxes will indicate that there is no input present as it does not match the selected output scan format.

9.104.5.4.3   Digital B Video/Key coloured status matrix

These indicators display the digital video and key input status and EDH for channel B. See Digital A Video/Key coloured status matrix 795 for more information.

9.104.5.5   Output Line Offset increment box

```
(+/- n lines)
```

Enables the output video scan timing to be offset from the reference scan timing in units of a single video line. To configure the offset to be earlier, enter a negative number of lines. To configure the offset to be later, enter a positive number of lines.

9.104.5.6   Page Take Delay group box

Clarity requires 8 or 9 frames advance notice of a take at timecode command when working with clips. This is due to disk system advance buffering. This delay can be long when a take is triggered from automation systems in response to a real-time user event. From keypress to take, a Clarity system generally needs a delay near to 10 frames through the entire system matrix (some automation systems may take around 5 frames before informing Clarity about an impending take). You can configure a constant 795 or minimum 795 delay.

9.104.5.6.1   Constant radio button

When selected, the system is configured to have a take delay of 8 or 9 frames, mirroring the behavior of previous software versions (<6.4.0.8).

9.104.5.6.2   Minimum radio button

When selected, the system is configured to keep the take delay to an absolute minimum.

9.104.5.7   Video Format drop-down list box

Only available for configuration when a job is NOT currently open.

```
(525, 625)
```

Enables the SD video scan format to be selected as either 525 lines or 625 lines. 525 line timing is normally used in countries which have adopted the NTSC standard whereas 625 line timing is used when the PAL or SECAM systems have been adopted.

9.104.5.8   Video Input Configuration group box

Enables the configuration of the systems' video input(s). You can configure the system to have two video/key input pairs 796, four individual video inputs without key 796 or two DSK inputs and two DVE inputs 796.

795   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.104.5.8.1   2 Video + 2 Key Inputs radio button

When selected, the system is configured for two video/key input pairs.

SEE ALSO

2 Video + 2 Key Inputs |1086⟩

9.104.5.8.2   4 Video Inputs radio button

When selected, the system is configured for four individual video inputs without key. Used when four live inputs with no or full key are required for squeezebacks.

SEE ALSO

4 Video Inputs |1086⟩

9.104.5.8.3   2 DSK Inputs + 2 DVE Inputs radio button

When selected, the system is configured for two individual DSK inputs without key and two DVE inputs. Uses the two key inputs as the sources for DVE's (paste live objects), while the two main video inputs are used as DSK inputs only. This setting was introduced to enable the external delaying of the main inputs (being fed from a DSK) relative to the key inputs (live video source) to give jump-free switching between pages that utilise foreground DVE's and DSK video.

SEE ALSO

2 DSK Inputs + 2 DVE Inputs |1087⟩

9.105   Select Batch Record File To Open dialog box

When recording clips from a connected VTR (GET), to display the Select Batch Record File To Open dialog box, follow the steps below:

- Select Batch Record |650⟩ on the Get/Put Clip dialog box |646⟩. The Batch Record File To Open dialog box is displayed.
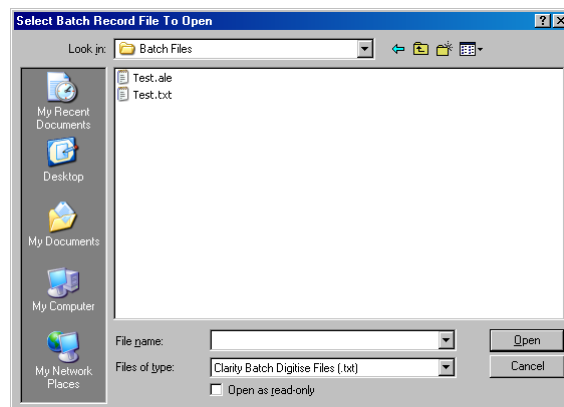
1. Browse to a location or where a batch file is located.
2. Select the desired batch file.
3. Select Open to utilise the file and return to the Get/Put Clip dialog box |646⟩.

9.106   Select Collage Font To Map To <font name>

When font mapping, to display the Select Collage Font To Map To dialog box where a Collage font can be selected, follow the steps below:

- Select Add |643⟩ on the Font Mapping Settings dialog box |642⟩ or Edit Collage |644⟩ on the Font Mappings dialog box |642⟩. The Select Collage Font To Map To dialog box is displayed.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   796

Copyright © 2000-2006 Pixel Power Ltd.
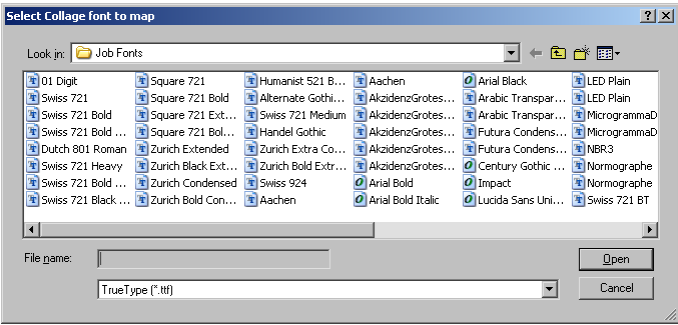
9.107 Select Custom Key Protect Image dialog box

To display the Select Custom Key Protect Image dialog box where an image containing a key or matte can be selected, follow the steps below:

- Select the browse button on the Key / Matte dialog tab 763 on the Page Settings dialog box 751. The Select Custom Key Protect Image dialog box is displayed.
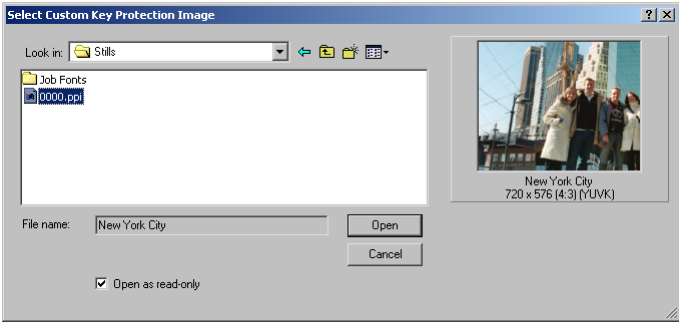
1. Browse to a location or where an still/image file is located.
2. Select the desired still/image file.
3. Select Open to insert the still/image and return to the Page Settings dialog box 751.

9.108 Select Font dialog box

Enables the selection of new font when performing job maintenance.

- To display the Select Font dialog box where a new font can be selected, select Change Item 687 on the Job Maintenance dialog box 686 when a font is selected on either the Fonts dialog tab 689 or All dialog tab 688. The Select Font dialog box is displayed.
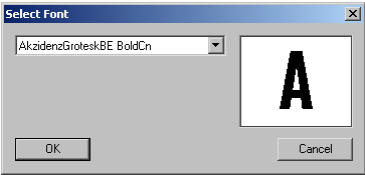
1. Select a new font using the drop-down list box.
2. Select OK to return back to the Job Maintenance dialog box 686.

9.109 Select Image dialog box

To display the Save Background Image dialog box where a stack still/image can be selected, follow the steps below:

- Select the browse button on the Insert/Edit Stack Entry dialog box [672]. The Select Image dialog box is displayed.
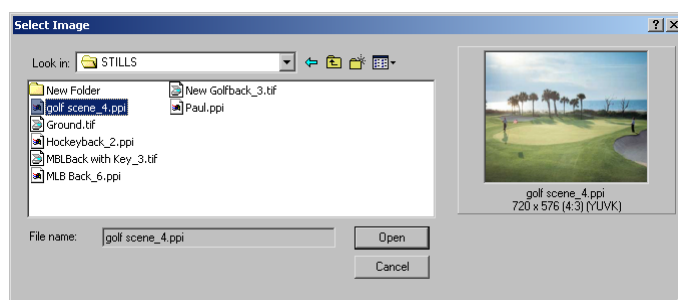
1. Browse to a location or where an still/image file is located.
2. Select the desired still/image file.
3. Select Open to insert the still/image and return to the Insert/Edit Stack Entry dialog box.

9.110 Select Page Paste Mode dialog box

The Ask on Paste [811] option in the Default Page Paste Mode group box [811] on the Edit dialog tab [810] on the User Preferences dialog box [809] must be selected before the Select Page Paste Mode dialog box can be displayed. This is the default setting.

To display the Select Page Paste Mode dialog box where page pasting options can be selected, follow the steps below:

1. Copy one or more page(s) selected in Page Browser [251]/Page List [252] to the Windows Clipboard using Edit> [384]Copy [386].
2. Select Edit> [384]Paste [386] with a page selected in the Page Browser [251]/Page List [252]. The Select Page Paste Mode dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
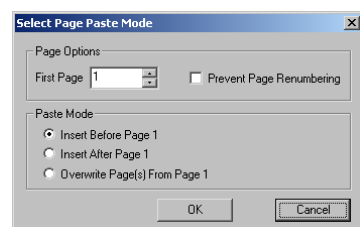
9.110.1 Page Options group box

The controls in the Page Options group box enable the definition of the first page to be affected by the paste operation [798] and whether page renumbering is prevented [799].

9.110.1.1 First Page increment box

`(0-10000 pages)`

To configure the first page from which the selected paste operation will start, type in the required page number in the First Page increment box in the range 0-10000 or use the increment and decrement buttons to jog the value up or down. This page number will be used by the options in the Paste Mode group box [799].

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   798

Copyright © 2000-2006 Pixel Power Ltd.

9.110.1.2 Prevent Page Renumbering check box

To ensure that pages in the Page List 252 are NOT renumbered when additional pages are pasted, check the Prevent Page Renumbering box. This setting is also mirrored using the Prevent Page Renumbering check box 799 in the Default Page Paste Mode group box 811 on the Edit dialog tab 810 on the User Preferences dialog box 809.

NOTE

If you have selected the Insert Before Page # 799 option and have page 1 selected in conjunction with the Prevent Page Renumbering box 799 being checked, the following message will be displayed informing you that pages must be renumbered if you are to continue.
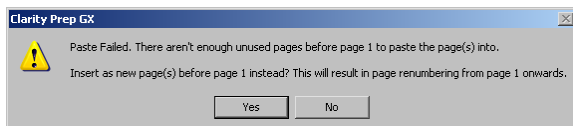
9.110.2 Paste Mode group box

The controls in the Page Mode group box enable the definition of the how copied pages are pasted into the Page Browser 251/Page List 252 when the Edit> 384 Paste 386 menu command or the CTRL + V shortcut is actioned. You can select to insert before 799, insert after 799 or overwrite pages 799.

9.110.2.1 Insert Before Page # radio button

Select the Insert Before Page # option to paste page(s) BEFORE the page defined using the First Page increment box 798 in the Page Options group box 798.

9.110.2.2 Insert After Page # radio button

Select the Insert After Page # option to paste page(s) AFTER the page defined using the First Page increment box 798 in the Page Options group box 798.

9.110.2.3 Overwrite Page(s) From Page # radio button

Select the Overwrite Page(s) From Page # option to OVERWRITE the page defined using the First Page increment box 798 in the Page Options group box 798 and any subsequent pages after that (if multiple pages have been copied).

9.111 Select Windows Font For dialog box

When font mapping, to display the Select Windows Font For dialog box where a local Windows font can be selected, follow the steps below:

- Select Edit Windows 645 on the Font Map Settings dialog box 644. The Select Windows Font For dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
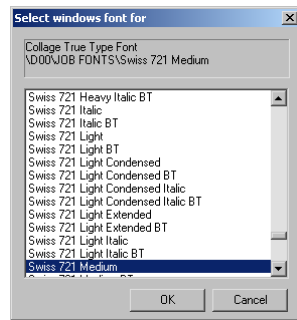
9.111.1   \<font information box\>

Displays the whether the Collage font that is to be mapped to the Windows font is Postscript or TrueType and also displays the location path relative the mapped Collage drive on the local system.

9.111.2   \<font selection list box\>

Using the list box, select the desired Windows font on the local system that you want to map to the selected Collage font shown in the <u>\<font information window\></u> 800 .

9.112   Set Playout Preview dialog box

The Set Playout Preview dialog box enables the selection of a user defined frame from the selected pages' playback. These frames are used to preview pages whilst they are cued within the <u>Preview Window(s)</u> 350 and on a external preview output if you have configured your system to operate in such a way. To display the Set Playout Preview dialog box, follow any of the methods listed below:

- whilst displaying the <u>Timeline control box</u> 355 and previewing the current pages' playback, select Set Page Preview from the <u>Preview controls</u> 356 .
- right-click on the desired page or group of pages in the Page Browser or Page List, and then select Set Page Preview Frame from the <u>shortcut menu</u> 256 that appears;
- select <u>Page></u> 390 <u>Set Page Preview Frame</u> 395 .

The Set Playout Preview dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
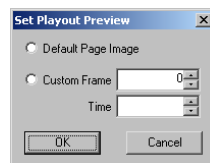
NOTE

When cueing pages, this functionality uses the software playout channel to render the correct preview frame and therefore the software playout channel must be available.

9.112.1   Custom Frame radio button and increment box

`(n frames)`

Select this option to ensure that the image (playback frame) used to preview the select page(s) is configured using the adjacent increment box. Enter a frame number using the adjacent increment box or use the increment and decrement buttons to jog the value up or down.

9.112.2 Default Page Image radio button

Select this option to ensure that the image (playback frame) used to preview the select page(s) is automatically configured by the CG Tools software.

9.112.3 Time radio button and increment box

`(HH:MM:SS:FF)`

Select this option to ensure that the image (playback frame) used to preview the select page(s) is configured by a timecode reference using the adjacent increment box. Enter a timecode in the format `HH:MM:SS:FF` using the adjacent increment box or use the increment and decrement buttons to jog the value up or down.

9.113 Set Preview Text dialog box

The Set Preview Text dialog box enables you to configure the preview text for each style preview shown in the Preview List on the User Defined Styles (Styles) (Crop Styles) control tab ⎡298⎤ or the Styles control tab ⎡353⎤ on the floating Styles/Logos control box ⎡351⎤.

- To display the Set Preview Text dialog box, select Set Preview Text from the User Defined Styles shortcut menu ⎡321⎤. The Set Preview Text dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
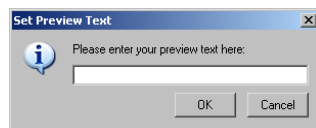
SEE ALSO

Preview text can also be configured using the Preview Text text box at the bottom of the Styles control tab ⎡353⎤ on the Styles/Logos control box ⎡351⎤.

9.113.1 Please enter your preview text here text box

Enter the example text that you want be shown for each preview in the Preview List on the User Defined Styles (Styles) (Crop Styles) control tab ⎡298⎤. If this text box is left cleared, then previews will use the default "A" character.

9.114 Source/Destination Job dialog box

To display the Source/Destination dialog box where a source or destination job can be selected when copying a Clarity job (.PPJ), follow the steps below:

- Select Browse in the Source group box ⎡610⎤ or Destination group box ⎡609⎤ on the Copy Clarity Job dialog box ⎡605⎤. The Source/Destination dialog box is displayed.
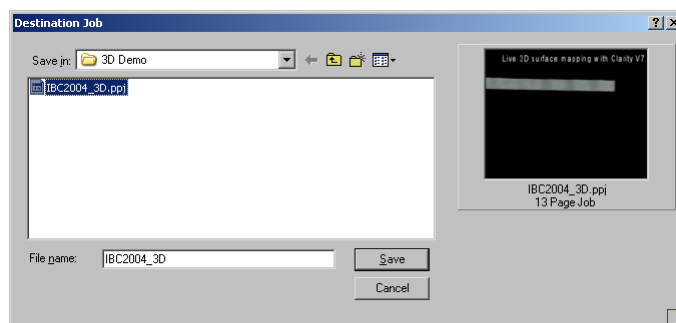
1. Browse to a new location or where an existing job is located.
2. Select the desired source or destination job or enter a new destination job name in the File name text box.
3. Select Save to store the path and return to the Copy Clarity Job dialog box [605].

9.115 Spell Check dialog box

The spell checking of text elements, pages and jobs is achieved using the Spell Check dialog box. To display the Spell Check dialog box:

- To display the Spell Check dialog box, select Edit(Job)> [384] Spell Check [387] to display the Spell Check sub-menu. From the Spell Check sub-menu, select an available command. The Spell Check dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
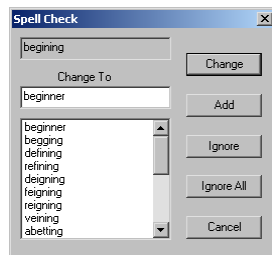
9.115.1 Add button

To add the word to the default dictionary and continue checking, select Add.

9.115.2 Change button

To correct the misspelled word and continue checking, select Change.

9.115.3 Change to text and list box

The best guess word is shown in the Change to text box. Alternative words are made available for selection in the list box below.

9.115.4 Ignore All button

To ignore all occurrences of this word and continue checking, select Ignore All.

9.115.5 Ignore button

To ignore the misspelled word and continue checking, select Ignore.

9.116   Subtitling dialog box

The subtitling of pages is achieved using the Subtitling dialog box. To display the Subtitling dialog box, firstly you must ensure that you have a page open within the Graphic Edit window |260| and that you are currently editing/viewing the foreground layer.

- To display the Subtitling dialog box, select Text> |408|Import Subtitle |418|. The Subtitling dialog box is displayed. The controls featured on the dialog box are different depending on what type of subtitle file is being imported.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
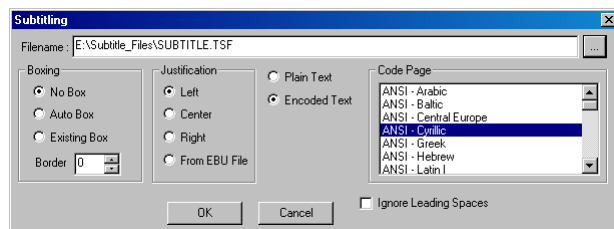
The above dialog box is shown when an ASCII file is selected.
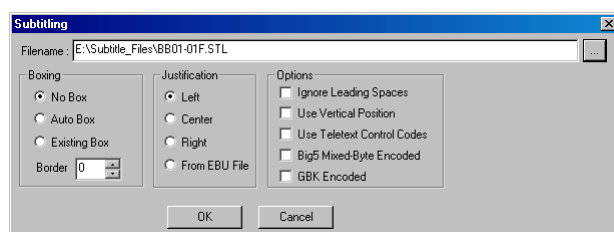
The above dialog box is shown when an EBU file is selected.

For most simple ASCII subtitle applications, you will need to turn the AutoBox and Center controls on, and all other controls off. For most simple EBU subtitle applications you will need to check the Auto Box, Center and Ignore Leading Spaces boxes and clear all other check boxes.

NOTE

For more information on subtitling, see Subtitling |535|.

9.116.1   Boxing group box

The subtitle text can be drawn over a box, or without a box. In order to use a box around the subtitle, an example rectangle must already have been defined as a foreground element in the current page.

9.116.1.1   Auto Box radio button

Select the Auto Box option to import subtitles over a automatically sized box.

9.116.1.2   Border increment box

If you have selected the Auto Box setting, set the border size in pixels around the subtitle using the Border increment box. Type in the required value or use the increment and decrement buttons to jog the value up or down.

9.116.1.3   Existing Box radio button

Select the Existing Box option to import subtitles over a box of predefined size.

NOTE

This setting assumes that the example foreground rectangle is of the correct size.

9.116.1.4   No Box radio button

Select the No Box option to import subtitles without a box.

9.116.2   Code Page list box

If the Encoded Text radio button [804] is selected, select the appropriate code page from the Code Page list box. For information on code pages, see ASCII subtitle code pages [536].

9.116.3   Encoded Text radio button

Select the Encoded Text option to specify that ASCII subtitle file is encoded with a code page information. For information on code pages, see ASCII subtitle code pages [536].

9.116.4   Filename text box

Enter the file path in the Filename text box of the subtitle file that you want to import or click/pen down on the browse button and browse for the desired text file. If the browse button is selected, the Open dialog box [748] appears where you can browse and select the desired file.

9.116.5   Ignore Leading Spaces check box

Many subtitling files contain extra spaces at the start and end of lines, as an approximation to positioning the text on the line. Unless a monospaced font of the correct size is used, this will create the wrong result when imported.

To ignore extra spaces at the start and end of lines, check the Ignore Leading Spaces box.

9.116.6   Justification group box

A subtitle file contains no information about justification. This can be added with the Left [804], Center [804] and Right [804] check boxes.

9.116.6.1   Centre check box

To import subtitles with centre justification, check the Centre box.

9.116.6.2   Left check box

To import subtitles with left justification, check the Left box.

9.116.6.3   Right check box

To import subtitles with right justification, check the Right box.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   804

Copyright © 2000-2006 Pixel Power Ltd.

9.116.7 Options group box

The Options group box enables configuration of import options including using Big5 mixed-byte encoding 805, GBK encoding 805, vertical positioning 805, ignoring white spaces 805 and utilising teletext control codes. 805

9.116.7.1 Big5 Mixed-Byte Encoded check box

To specify that the subtitle file has been created using Big5 character encoding, ensure that the Big5 Mixed-Byte Encoded box is checked. Big-5 is a multi-byte character encoding method used in Taiwan and Hong Kong for Traditional Chinese characters. Its Mainland China equivalent is GB.

http://en.wikipedia.org/wiki/Big5

NOTE

You must ensure that the currently selected font supports Big5 encoding.

9.116.7.2 GBK Encoded check box

To specify that the subtitle file has been created using GBK character encoding, ensure that the GBK Encoded box is checked. GBK is an extended multi-byte character encoding method used in Mainland China.

9.116.7.3 Ignore Leading Spaces check box

Many subtitling files contain extra spaces at the start and end of lines, as an approximation to positioning the text on the line. Unless a monospaced font of the correct size is used, this will create the wrong result when imported.

To ignore extra spaces at the start and end of lines, check the Ignore Leading Spaces box.

9.116.7.4 Use Teletext Control Codes check box

The EBU subtitle file can contain teletext control codes in addition to the timecode and text information. These codes control the positioning and colour of the text. The teletext control codes allow a very limited number of text colours and assume that a monospaced font is being used. Hence for most applications, it is best to ignore any teletext control codes.

To use the teletext control codes, check the Use Teletext Control Codes box.

9.116.7.5 Use Vertical Position check box

The vertical positioning for subtitles can either be taken from the EBU subtitle file, or it can be calculated to appear inside the specified safe area of the page. The vertical positioning information contained within an EBU subtitle file is based around Teletext line numbers and should only be used with small font sizes of about 12 lines high.

To use vertical positioning from the EBU subtitle file, check the Use Vertical Position box.

9.116.8 Plain Text radio button

Select the Plain Text option to specify that ASCII subtitle file is formatted as plain text.

805   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.117   Supported Features dialog box

Enables the viewing of the current features for the current CG Tools software product.

- To display the Supported Features dialog box, select <u>Licence></u> ⌐435¬<u>Show Features</u> ⌐436¬. The Supported Features dialog box is displayed.
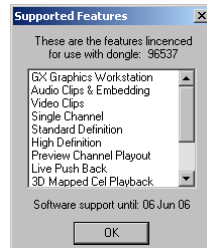
SEE ALSO

<u>Software licensing</u> ⌐114¬

9.118   TGA Image Options dialog box

The TGA Image Options dialog box is displayed in circumstances where you are saving <u>Truevision TGA (TARGA)</u> ⌐1130¬ images from the CG Tools software. For example, when saving the background layer of a page to an image using <u>Background></u> ⌐419¬<u>Save Background</u> ⌐420¬. After selecting the TGA file format on the <u>Save Background Image dialog box</u> ⌐781¬ and selecting OK, the TGA Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
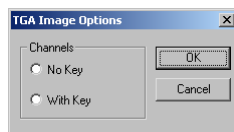
9.118.1   Channels group box

Select whether to save the TGA image <u>with</u> ⌐806¬ or <u>without</u> ⌐806¬ its key/alpha channel.

9.118.1.1   No Key radio button

Select the No Key option to omit the key/alpha channel from the saved TGA image.

9.118.1.2   With Key radio button

Select the With Key option to include the key/alpha channel with the saved TGA image.

9.119   Test Patterns dialog box [CLARITY]

To be completed at a later date.

IDD_TESTPATTERNS

<PAW>

9.120 TIFF Image Options dialog box

The TIFF Image Options dialog box is displayed in circumstances where you are saving TIFF images ⌐1130⌐ from the CG Tools software. For example, when saving the background layer of a page to an image using Background> ⌐419⌐Save Background ⌐420⌐. After selecting the TIFF file format on the Save Background Image dialog box ⌐781⌐ and selecting OK, the TIFF Image Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
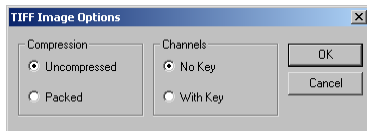
9.120.1 Compression group box

Select whether to save the TIFF image without compression ⌐807⌐ or with compression ⌐807⌐ using the lossless RLE (Run Length Encoding) Packbit scheme.

9.120.1.1 Uncompressed radio button

Select this option to save the select TIFF image without any compression, ensuring the highest possible quality.

9.120.1.2 Packbit radio button

Select this option to save the select TIFF image using the lossless RLE (Run Length Encoding ⌐1130⌐) ⌐1130⌐ Packbit scheme.

9.120.2 Channels group box

Select whether to save the TIFF image with ⌐807⌐ or without ⌐807⌐ its key/alpha channel.

9.120.2.1 No Key radio button

Select the No Key option to omit the key/alpha channel from the saved TIFF image.

9.120.2.2 With Key radio button

Select the With Key option to include the key/alpha channel with the saved TIFF image.

9.121 Timecode In/Out dialog box

Enables the editing of timecode in and out values for pages.

- To display the Timecode In/Out dialog box where timecode in and out values can be edited, double-click on the Timecode In or Timecode Out column in the Page List ⌐252⌐ for the page that you want to edit. The Timecode In/Out dialog box is displayed.
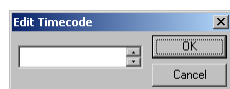
NOTE

The Timecode In and Timecode Out columns are only displayed when the CG Tools software is operating in

Timecode/Subtitle page mode. See Job/Page toolbar 248 and Page Modes 244 for more information.

9.122 Unpack Job From Zip Archive dialog box

Enables the unpacking of a Clarity job from a zipped job package created using the Package dialog tab 614 on the Copy Clarity Job dialog box 605.

- To display the Unpack Job From Zip Archive dialog box, select File> 378 Unpack Job From Zip 381. The Unpack Job From Zip Archive dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
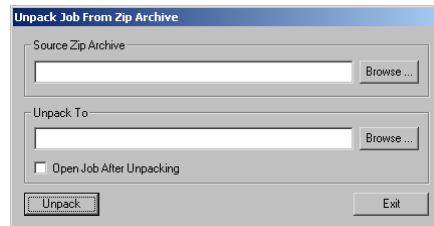
9.122.1 Exit button

Select the Exit button to close the Unpack Job From Zip Archive dialog box.

9.122.2 Source ZIP archive text box and Browse button

Enter the file path in the Source Zip Archive text box of the zipped job package file that you want to unpack or select the Browse button and browse to the desired location and file. If the browse button is selected, the Open dialog box 748 appears where you can browse and select the desired zip file.

9.122.3 Unpack to group box

The controls in the Unpack to group box enable the selection of a destination folder 808 for the unpacked job and whether the unpacked job is subsequently opened 809.

9.122.3.1 Text box and Browse button

Enter the file path in the Unpack to text box where you want to unpack the selected job package or select the Browse button and browse to the desired location. If the browse button is selected, the Browse for Folder dialog box appears where you can browse and select the desired location.
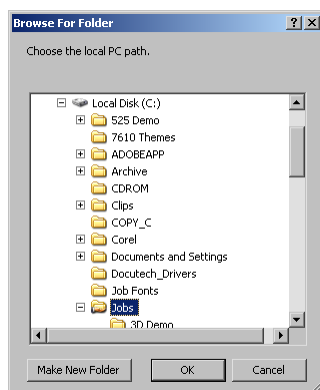
9.122.3.2 Open Job After Unpacking check box

If it is desirable for the job contained in the selected ZIP archive to be subsequently opened after it has been unpacked, ensure that the Open Job After Unpacking box is checked.

9.122.4 Unpack button

To perform the unpacking process, select the Unpack button.

9.123 User Preferences dialog box

The User Preferences dialog box enables the configuration of a wide variety of settings via dialog tabs for the user currently logged into the current system. To display the User Preferences dialog box where user settings can be configured, follow the steps below:

- Select Options> [429] Preferences>User Preferences [430]. The User Preferences dialog box appears.

The User Preferences dialog box contains up to six dialog tabs. Some dialog tabs may not be visible due to software or hardware restrictions. New or edited dialog tabs since the last release are highlighted with dark grey shading. The purpose of each tab is explained below:

Tab	Enables configuration of	Clarity	PREP
Edit [810]	Editing software options including arrow key acceleration [810], default page paste mode [811], edit output channels [812], field marker settings [813], general text settings [814], layer tree settings [813], scroll settings [813], software edit mode [812] and undo/redo [815].	■	■
General [816]	General software options including auto-save [816], Clarity job load [816], colours used for missing files [817], graphics filtering [817], page naming [818], software preview channel [818] and start-up [817].	■	■
Page Formats [819]	Default page format settings [819].	■	■
Voice-Over [820]	Voice over settings for Clarity systems [CLARITY].	■	
User QuickLoads [821]	Definition and configuration of settings enabling jobs to be loaded quickly including quick load job filename [723], user interface name [723] and whether a job is loaded on application startup [723].	■	■
Password [823]	User password settings.	■	■

SEE ALSO

Options> [429] Preferences>User Preferences [430].

9.123.1 Edit dialog tab

To configure software editing options, follow the step below:

- Select the Edit dialog tab on the <u>User Preferences dialog box</u> 809. The Edit dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
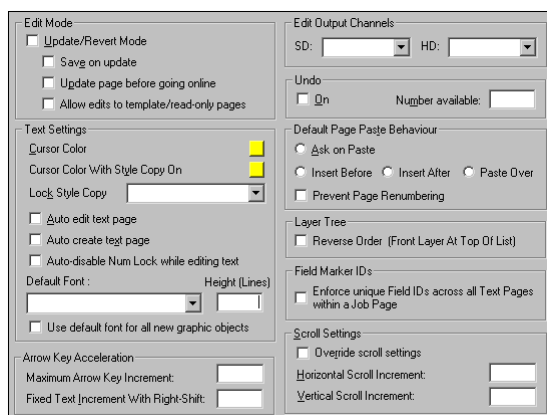
9.123.1.1 Arrow Key Acceleration group box

The controls in the Arrow Key Acceleration group box enable the configuration of text manipulation increments when using <u>keyboard shortcuts to manipulate text</u> 810 and when using <u>keyboard shortcuts that feature the right SHIFT key</u> 810.

9.123.1.1.1 Maximum Arrow Key Increment text box

`(0-100 pixels)`

When using the <u>keyboard shortcuts</u> 205 to manipulate text (movement, spacing etc.), the maximum increment was previously set a 5 pixels. You can now define the maximum increment in pixels. To configure the increment value in pixels, type in the required value in the Maximum Arrow Key Increment text box in the range 0-100 or use the increment and decrement buttons to jog the value up or down.

The example below shows the keyboard shortcut used to move text. The increment between each press of the arrow key is the increment defined using the Maximum Arrow Key Increment text box.

Left ⎙Ctrl⎙ + Left ⎙Alt⎙ + ⬚

Increment value in pixels used when text within a text page or when a text line or spline is manipulated using keyboard shortcuts
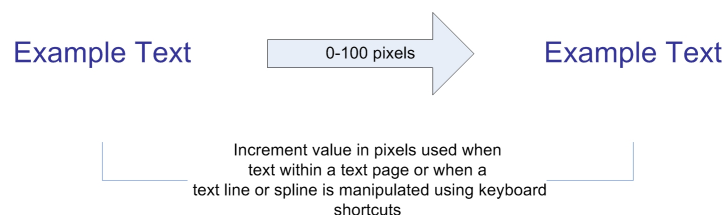
9.123.1.1.2 Fixed Text Increment With Right-Shift text box

`(0-100 pixels)`

To configure the increment value in pixels used when text within a text page or when a text line or spline is manipulated using <u>keyboard shortcuts</u> 205 that feature the right SHIFT key, type in the required value in the Fixed Text Increment With Right-Shift text box in the range 0-100 or use the increment and decrement buttons to jog the value up or down.

The example below shows the keyboard shortcut used to *FAST* move text. The increment between each press of the arrow key is the increment defined using the Fixed Text Increment With Right-Shift text box.

Left Ctrl + Left Alt + Right Shift + ⊡

Example Text → 0-100 pixels → Example Text

Increment value in pixels used when
text within a text page or when a
text line or spline is manipulated using keyboard
shortcuts that feature the right SHIFT key
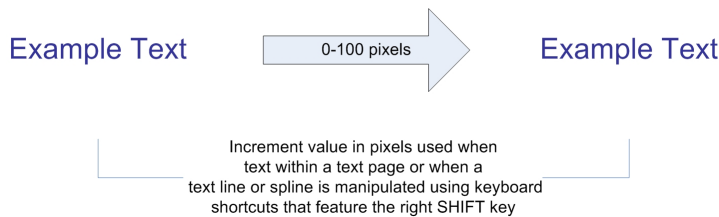
9.123.1.2 Default Page Paste Mode group box

Enables the selection of how copied pages are pasted into the Page Browser |251↑|/Page List |252↑| when the Edit> |384↑| Paste |386↑| menu command or the Left CTRL + V shortcut is actioned. You can either:

- select to Insert After |81↑|, Insert Before |81↑| or Insert Over |81↑|;
- select to display |81↑| the Select Page Paste Mode dialog box |798↑| when a paste operation is actioned and make your decision using the controls on the dialog box.

Additionally, irrelevant of the way in which you are pasting pages, you can select to prevent page renumbering |81↑| when pages are pasted.

9.123.1.2.1 Ask on Paste radio button

Select the Ask on Paste option to ensure that the Select Page Paste Mode dialog box |798↑| is displayed when trying to paste copied pages into the Page Browser |251↑|/Page List |252↑| using the Edit> |384↑| Paste |386↑| menu command or the Left CTRL + V shortcut.

NOTE

This is the default option when the CG Tools software is first installed.

9.123.1.2.2 Insert After radio button

Select the Insert After option to paste page(s) AFTER the selected page in the Page Browser |251↑|/Page List |252↑| when the Edit> |384↑|Paste |386↑| menu command or the Left CTRL + V shortcut is actioned.

9.123.1.2.3 Insert Before radio button

Select the Insert Before option to paste page(s) BEFORE the selected page in the Page Browser |251↑|/Page List |252↑| when the Edit> |384↑|Paste |386↑| menu command or the Left CTRL + V shortcut is actioned.

9.123.1.2.4 Insert Over radio button

Select the Insert Over option to OVERWRITE the selected page in the Page Browser |251↑|/Page List |252↑| and any subsequent pages after that (if multiple pages have been copied) when the Edit> |384↑|Paste |386↑| menu command or the Left CTRL + V shortcut is actioned.

9.123.1.2.5 Prevent Page Renumbering check box

To ensure that pages in the Page List |252↑| are NOT renumbered when additional pages are pasted, check the Prevent Page Renumbering box. This setting is also mirrored using the Prevent Page Renumbering check box |799↑| on the Select Page Paste Mode dialog box |798↑|.

9.123.1.3   Edit Mode group box

The software can run in one of two editing modes. With update/revert [812] mode turned on, when the page currently open for editing in the Graphic Edit window is closed, you are prompted whether you want to save any changes made. With update/revert mode turned off, when the page currently open for editing in the Graphic Edit window [260] is closed, edits are saved without prompting. The page preview in the Page Browser [251] is updated in real-time whilst edits are made to the selected page.

9.123.1.3.1   Allow edits to read only pages check box

This option is only available for configuration if update/revert mode is turned on.

When update/revert mode is turned on, check the Allow edits to read only pages box this to enable edits to pages marked as read-only. Once edits have been made, the edits can only be saved to a new page and the original edited page is left unchanged. This option is useful if you want to create new template pages based on pages marked as read-only

9.123.1.3.2   Save on update check box

This option is only available for configuration if update/revert mode is turned on.

To ensure that the current job is saved every time you select to any save changes made to a page after the Graphic Edit window [260] is closed, ensure that the Save on Update box is checked.

When working on a single page job, it is often to required that individual pages are updated to reflect the latest changes before they are taken to air whilst online. Using this option enables an operator to work on individual pages whilst another operator is taking the job to air using a Clarity system unit. This option also applies when working on a normal job. In these circumstances, this option also automatically saves the current job after page updates, even when in normal job mode. The job is automatically saved each time a page is updated.

9.123.1.3.3   Update page before going online check box

This option is only available for configuration if update/revert mode is turned on.

To ensure that pages are updated before being taken to air whilst online, ensure that the Update page before going online box is checked.

9.123.1.3.4   Update/Revert Mode check box

This option is only available for configuration when no job is currently open.

Ensure that the Update/Revert mode box is checked to turn update/revert mode on. Clear the Update/Revert mode box to turn update/revert mode off.

NOTE

If the software is currently operating with edit/revert mode turned on, there are three additional settings that can be configured; saving on update [812], updating pages before going online [812] and allowing edits to read only pages [812].

9.123.1.4   Edit Output Channels group box

(1, 2, Auto Select, None)

When using a dual channel Clarity system unit, you can optionally select which channel is configured as the Edit output i.e. the broadcast output that shows edits to pages before going online. Whether you specify a channel using the SD or HD drop down list boxes is dependent on the specification of your system unit.

Follow the steps below:

1.   To select an edit output channel explicitly, select either 1 or 2 from either the SD or HD drop down list box.
2.   If do not want to select a channel explicitly, but want the software to select a channel automatically that will match the video format and aspect ratio of a job, select Auto-Select.
3.   If you do not wish to select to preview edits to pages before going online, select None.

NOTE

This setting is next used when a page is subsequently opened for editing in the Graphic Edit window [260]. If 1, 2 or Auto Select is selected, when the Graphic Edit window is closed for editing, the selected output monitor is returned to black.

9.123.1.5   Field Marker ID's group box

The controls in the Field Marker ID's group box enable the enforcement of unique field ID's across all text pages within a page [813].

9.123.1.5.1   Enforce unique Field IDs across all Text Pages within a Job Page check box

Previously, you could have page template field markers with duplicate ID's on multiple text pages which could cause some confusion during editing. Now, when inserting page template field markers, unique field marker IDs can now be optionally forced across multiple text pages contained on the same page. Check the Enforce unique Field IDs across all Text Pages within a Job Page to force unique page template field ID's.

This revised method of page template field marker enumeration enables more consistent use of the TAB key when the Text> [408]Markers>Lock Fields [413] setting is turned on. The software now automatically jumps to the next text page layer if the next page template field marker exists on that layer. When opening page for editing that feature duplicate page template field markers (i.e. jobs created in previous versions of the CG Tools software), a message box is displayed informing you that the situation exists and asks if you want to re-number page template fields within text pages.
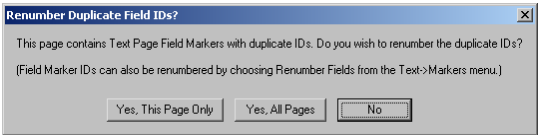
You have the following options:

Option	Description
Yes, This Page Only	Enforce unique page template field ID's on the current page only.
Yes, All Pages	Enforce unique page template field ID's on all pages in the current job.
No	Do not enforce unique page template field ID's.

SEE ALSO

Field Settings (Field) control tab [283]

9.123.1.6   Layer Tree group box

The controls in the Layer Tree group box enable reversing of the order [813] in which page elements are shown in the layer tree.

9.123.1.6.1   Reverse Order (Front Layer At Top Of List) check box

If desired, you can reverse the order in which the entire layer tree is displayed. By default, the first element shown in the Layer Tree control box [341] is the top layer in the Graphic Edit window [260]. If the Reverse Order check box is checked, then the first element shown in the Layer Tree control box is then the bottom layer in the Graphic Edit window.

9.123.1.7   Scroll Settings group box

```
(10-360 pixels)
```

When editing text and the text extends beyond the visual area of the Graphic Edit window [260], the software will scroll to maintain a view of the text cursor. The default scroll value in pixels is shown in the Scroll Settings group box and can over-ridden with new values if desired.

To override the default scroll settings, follow the steps below:

1. Ensure that the Override scroll settings box is checked.
2. In the Horizontal Scroll Increment increment box, enter the required horizontal scroll value or use the increment and decrement buttons to jog the value up or down.
3. In the Vertical Scroll Increment increment box, enter the required vertical scroll value or use the increment and decrement buttons to jog the value up or down.

9.123.1.8 Text Settings group box

The controls in the Text Settings group box enable you to configure the text cursor colour [814], the text cursor colour when the Style Copy function is turned on [814], whether the numeric keypad is disabled [814] when editing text, the default font [814] and height [815] for text, whether the style copy function is locked [815] and the whether text pages are created [814] or selected [814] automatically when a page is opened in the Graphic Edit window [260].

9.123.1.8.1 Auto create text page check box

To automatically create a text page on every new page that is created, ensure that the Auto create text page box is checked.

9.123.1.8.2 Auto edit text page check box

To select that text pages are automatically selected for editing when pages are opened within the Graphic Edit window [260], ensure that the Auto edit text page box is checked.

9.123.1.8.3 Auto-disable Num Lock while editing text check box

To automatically disable the numeral lock on the numerical keypad during text page editing, ensure that the Auto create text page box is checked.

9.123.1.8.4 Cursor Colour control

To configure the text cursor colour:

1. Click on the colour selection box next to the Cursor Colour label.
   The Colour Selection dialog box [599] is displayed.
2. Select a colour from the Colour Selection dialog box, then select OK.

9.123.1.8.5 Cursor Color With Style Copy On control

To configure the text cursor colour when the Style Copy check box is checked on the Text page control set [313]:

1. Click on the colour selection box next to the Cursor Color With Style Copy On label.
   The Colour Selection dialog box [599] is displayed.
2. Select a colour from the Colour Selection dialog box, then select OK.

9.123.1.8.6 Default Font drop-down list box

```
(default font)
```

To define the default font that will be used by text pages, lines, spline and clocks, select an available font from the Default Font drop-down list box.

SEE ALSO

The default font height can be defined using the Height text box [815].

9.123.1.8.7 Height text box

(text height in pixels)

To define the default character height that will be used by text pages, lines, spline and clocks, enter a value in the Height box.

SEE ALSO

The default font can also be selected using the Default Font drop-down list box 814.

9.123.1.8.8 Lock Style Copy drop-down list box

(Always Off, Always On, User Changeable)

The style copy functionality can be now be configured to be always off, always on or user changeable. If this function it set to Always On or Always Off, then the Style Copy check box on the Text Page control set 313 is disabled. You have the following options:

Option	Description
Always Off	Style copy function is always off; Style Copy check box on the Text Page control set 313 is disabled.
Always On	Style copy function is always on; Style Copy check box on the Text Page control set 313 is disabled.
User Changeable	Style copy function is user selectable via the Style Copy check box on the Text Page control set 313 is disabled.

9.123.1.8.9 Use default font for all new graphic objects check box

To ensure that the font selected using the Default Font drop-down list box 814 is used by all new graphic objects, check the Use default font for all new graphic objects box.

9.123.1.9 Undo group box

The Edit> 384 Undo 385 and Edit> 384 Redo 385 commands enable actions taken whilst editing pages using the Graphic Edit window 260 to be reversed (Undo) or re-instated (Redo). It is recommended that you turn this option on if you are working on large amounts of text or editing text fields.

The availability of the Edit> 384 Undo 385 and Edit> 384 Redo 385 commands is selected using the controls in the Undo/Redo group box.

9.123.1.9.1 Number available text box

(0-99)

This option is only available if the On box has been checked.

Additionally, you can define the number of actions remembered by the software that can subsequently actioned by the Edit> 384 Undo 385 and Edit> 384 Redo 385 commands. In the Number available increment box, type in the required value in the range 0-99 or use the increment and decrement buttons to jog the value up or down.

NOTE

Increasing the number of actions that will be remembered by the software will reduce RAM available to other applications/processes as more actions are stored.

9.123.1.9.2 On check box

To make the Edit> 384 Undo 385 and Edit> 384 Redo 385 commands available for selection, ensure that the On box is checked.

9.123.2 General dialog tab

To configure general software options, follow the steps below:

- Select the General dialog tab on the <u>User Preferences dialog box</u> ⌐809⌐. The General dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
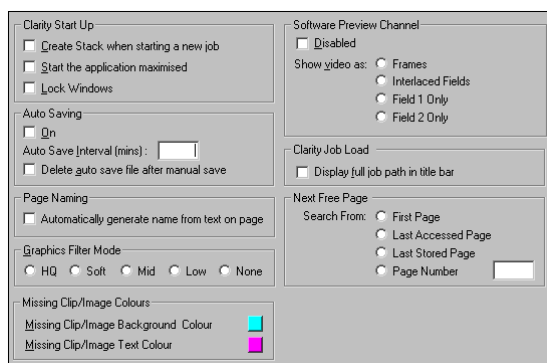
9.123.2.1 Auto Saving group box

Auto save files for job files (.PPJ) have the .PAS file extension. These files can be optionally deleted when the originating job file (.PPJ) is saved. This group box enables the <u>use</u> ⌐816⌐ and configuration of auto save functionality including <u>interval</u> ⌐816⌐ and <u>deletion of the auto save file automatically</u> ⌐816⌐.

NOTE

Autosave .PAS and .BAK files are assigned as Windows hidden files and as such they will not be visible unless hidden files are displayed.

9.123.2.1.1 Auto Save Interval (mins) text box

`(1-59 minutes)`

In the Auto Save Interval (mins) text box, enter the desired the interval between which automatic saves are made.

9.123.2.1.2 Delete auto save file after manual save check box

To ensure that the .PAS auto save file is deleted when the originating job file (.PPJ) is saved, ensure that the Delete auto save file after manual save box is checked.

9.123.2.1.3 On check box

To turn on the automatic saving of jobs, ensure that the On box is checked.

9.123.2.2 Clarity Job Load group box

Enables configuration of job load options including the <u>display of the full job path</u> ⌐816⌐ in the main application window title bar.

9.123.2.2.1 Display full job path in title bar check box

To ensure that the full path of the current job is displayed in the main application window title bar, check the Display full job path in title bar box.

9.123.2.3   Clarity Start Up group box

Enables the configuration of software start-up settings including the automatic creation of page stacks [817], maximising the application window [817] and locking GUI windows [817].

9.123.2.3.1   Create Page stack when starting a new job check box

To ensure that a page stack is created when a new job is created, ensure that the Create Page stack when starting a new job box is checked.

9.123.2.3.2   Lock Windows check box

To ensure that all user interface windows (i.e the Job Edit window [250] and the Graphic Edit window [260]) are locked in their current position, ensure that the Lock Windows box is checked. The selection of this option will take effect immediately.

9.123.2.3.3   Start the application maximised check box

To ensure that the software application starts in a maximised window, ensure that the Start the application maximised box is checked.

9.123.2.4   Graphics Filter Mode group box

Options within this group box are only available for configuration when no job is currently open.

The standard filtering (HQ) has been chosen to provide high quality text as demanded by character generators. In some circumstances, less softening of edges may be required, or even no anti-aliasing at all. To provide for this, four other alternative levels of filtering can be selected.

To configure the filtering quality of any graphics shown on any pages in subsequent jobs, select the desired filter mode using the radio buttons in the Graphics Filter Mode group box. The settings are explained below:

Mode	Description
None	No anti-aliasing.
Low	Reduced anti-aliasing.
Mid	Standard anti-aliasing.
Soft	Increased anti-aliasing.
HQ	Full anti-aliasing (recommended for non-integer rolls speeds) (Default).

9.123.2.5   Missing Clip/Image Colours group box

Enables the configuration of the background or text colour for the missing clip/image place holder. This feature is useful when your house style does not contrast against the default colouring of the missing clip/image place holder background and foreground text. To change the background or text colour of the missing clip/image place holder, click on the relevant colour selection box in the Missing Clip/Image Colours group box and select a colour from the Colour Selection dialog box [599] that appears.

9.123.2.6   Next Free Page group box

When storing or reading the page being edited in the Graphic Edit window using the Store Page [191] and Read Page [191] keys on the Version 2 Rapidaction keyboard [185], before pressing Store Page/Read Page, if the Next Free key [193] on the numeric keypad is pressed without previously typing a number on the numeric keypad, the next free page (a page that has not been edited) after your current edited page is now read from OR stored to by default. This behaviour can be configured using the controls in the Next Free Page group box. The controls in this group box define how the CG Tools software finds the next free page after pressing the Next Free key on the Version 2 Rapidaction keyboard. You can configure the software to search from the first page in the current job [818], the last accessed page [818], the last stored page [818] and from a fixed page number [818].

817   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

9.123.2.6.1 First Page radio button

Select the First Page option to ensure that the CG Tools software searches for the next free page from the first page in the Page List when the Next Free key is pressed before a Read Page or Store Page action is parsed.

9.123.2.6.2 Last Accessed Page radio button

Select the Last Accessed Page option to ensure that the CG Tools software searches for the next free page from the page that was last read or stored when the Next Free key is pressed before a Read Page or Store Page action is parsed.

9.123.2.6.3 Last Stored Page radio button

Select the Last Stored Page option to ensure that the CG Tools software searches for the next free page from the page that was last stored when the Next Free key is pressed before a Read Page or Store Page action is parsed.

9.123.2.6.4 Page Number radio button and text box

Select the Page Number option to ensure that the CG Tools software searches for the next free page AFTER a designated page number when the Next Free key is pressed before a Read Page or Store Page action is parsed. Using the adjacent text box, specify a page number that will be searched from.

9.123.2.7 Page Naming group box

The controls in the Page Naming group box enable the selection of whether to automatically generate page names from text pages ⌐818⌐.

9.123.2.7.1 Automatically generate name from text on page check box

If desired, you can automatically generate page names from the text contained in the first text page (if present) on each page. This furthers the functionality provided by the Page> ⌐390⌐ Auto Set Name ⌐391⌐ and Page> ⌐390⌐ Change Name ⌐392⌐ commands. Check the Automatically generate name from text on page box to generate page names from text page text. If this setting is turned on, in situations where the pages do not contain any text layers, the page name is taken from the pages' background image name or clip name (if specified).

SEE ALSO

Page> ⌐390⌐ Auto Set Name ⌐391⌐
Page> ⌐390⌐ Change Name ⌐392⌐

9.123.2.8 Software Preview Channel group box

Enables both the disablement ⌐818⌐ of the software preview output channel (UI channel) and configuration of how output is portrayed on the software preview output channel. Select from frames ⌐819⌐, fields ⌐819⌐ or interlaced fields ⌐819⌐.

SEE ALSO

Playout Controls ⌐343⌐
Available channels ⌐343⌐

9.123.2.8.1 Disabled check box

The software preview channel (UI channel) is enabled by default. In circumstances where your system is unable to support playback on the software preview channel (due to the performance of the systems' graphics card), you can disable playback on the software preview channel so that the possible warning message is not displayed inadvertently. To disable the software preview channel, ensure that the Disabled box is checked.

NOTE

You will have to re-start the CG Tools software in order for the change to take effect.

9.123.2.8.2 Frames radio button

Select the Frames option to ensure that frames are displayed on the software preview output channel.

9.123.2.8.3 Field Only radio buttons

Select either the Field 1 Only option to display field 1 or the Field 2 Only option to display field 2 on the software preview output channel.

9.123.2.8.4 Interlaced Fields radio button

Select the Interlaced Fields option to ensure that interlaced fields are displayed on the software preview output channel.

9.123.3 Page Formats dialog tab

To configure page formatting options, follow the step below:

- Select the Page Formats dialog tab on the <u>User Preferences dialog box</u> [809]. The Page Formats dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
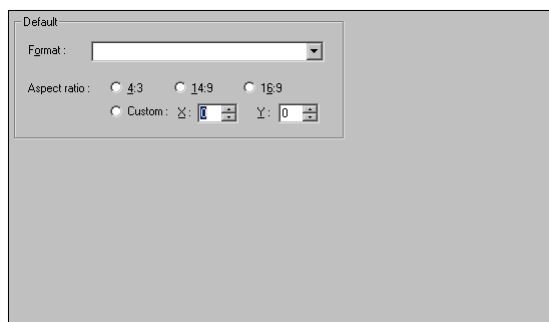
9.123.3.1 Default group box

Use the controls in the Default group box to configure the default/current job page format configuration. This includes <u>aspect ratio</u> [819], <u>custom settings</u> [819] and <u>video format</u> [820].

9.123.3.1.1 Aspect Ratio radio buttons

Depending on your video format selection, some or all of the Aspect Ratio controls may become enabled. Select 4:3, 14:9 or 16:9 to select the desired aspect ratio.

SEE ALSO

<u>Aspect ratios</u> [548]

9.123.3.1.2 Custom radio button and X and Y increment boxes

`(n:n)`

Depending on your video format selection, the Custom controls may become enabled. If you want to configure a custom aspect ratio, select the Custom option and then configure the X and Y increment boxes.

9.123.3.1.3   Format drop-down list box

Select the video format using the Format drop-down list box.

SEE ALSO

Video standards ⌐547⌐

9.123.4   Voice-Over dialog tab [CLARITY]

The configuration of voice-over settings for Clarity system units is achieved using the Voice-Over dialog tab.

To configure voice over options, follow the step below:

- Select the Voice-Over dialog tab on the User Preferences dialog box ⌐809⌐. The Voice-Over dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
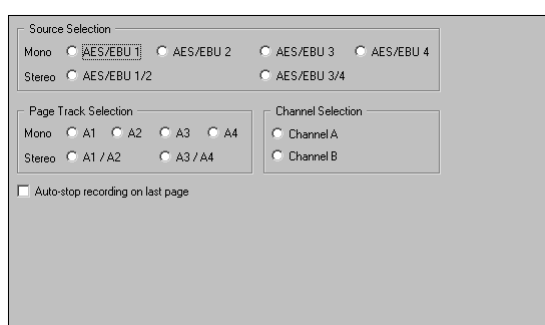
SEE ALSO

Voice over overview ⌐549⌐
Voice over audio configuration ⌐550⌐
Voice Over Controls dialog box [CLARITY] ⌐358⌐

9.123.4.1   Auto-stop recording on last page check box

To ensure that recording is stopped when the last page in a sequence is reached, check the Auto-stop recording on last page box. A page sequence is defined as a group of pages containing no wait for takes (just delays).

9.123.4.2   Channel Selection group box

The controls in the Channel Selection group box enable the selection of which channel to use as the recording source for voice over recordings.

Radio button	Assigns
Channel A	Recording of voice over audio from the selected AES/EBU input ⌐821⌐ on channel A.
Channel B	Recording of voice over audio from the selected AES/EBU input ⌐821⌐ on channel B.

9.123.4.3   Page Track Selection group box

The controls in the Page Track Selection group box enable the selection of which page background audio track(s) are to be used to reference recorded voice audio clip on the selected clip drive. They match up to the A1, A2, A3 and A4 selection controls on the A1/2/3/4 dialog sub-tab ⌐752⌐ of the Audio dialog tab ⌐752⌐ on the User Preferences dialog box ⌐809⌐.

Radio button	Assigns
A1	Recording of voice over audio as page background audio track A1 (mono).
A2	Recording of voice over audio as page background audio track A2 (mono).
A3	Recording of voice over audio as page background audio track A3 (mono).
A4	Recording of voice over audio as page background audio track A1 (mono).
A1/A2	Recording of voice over audio as page background audio track A1/2 (stereo).
A3/A4	Recording of voice over audio as page background audio track A3/4 (stereo).

9.123.4.4   Source Selection group box

The controls in the Source Selection group box enable the selection of which AES/EBU audio input (mono or stereo) is to be used as the source for voice over recording. These setting apply only to a single CG channel which can be selected using the controls in the Channel Selection group box 820.

Radio button	Assigns
AES/EBU 1	AES/EBU 1 mono input as voice over recording source for the selected channel.
AES/EBU 2	AES/EBU 2 mono input as voice over recording source for the selected channel.
AES/EBU 3	AES/EBU 2 mono input as voice over recording source for the selected channel.
AES/EBU 4	AES/EBU 2 mono input as voice over recording source for the selected channel.
AES/EBU 1/2	AES/EBU 1/2 stereo input (1st stereo pair) as voice over recording source for the selected channel.
AES/EBU 3/4	AES/EBU 3/4 stereo input (2nd stereo pair) as voice over recording source for the selected channel.

SEE ALSO

System input and output 442

9.123.5   User QuickLoads dialog tab

The definition and configuration of settings enabling jobs to be loaded quickly is achieved using the User QuickLoads dialog tab. QuickLoads enable the current user to associate their favourite jobs that they use regularly to designated shortcut key combinations. QuickLoads that are active for the current user also appear in the File> 378 QuickLoads>User QuickLoads 383 menu.

QuickLoads that are configured and made active using the User QuickLoads dialog tab will override those defined for the local system using the Local QuickLoads dialog tab 722 on the Local Preferences dialog box 696. In situations where this occurs, the following message is displayed at the bottom of the dialog tab when a QuickLoad is selected:

```
Note: This QuickLoad will override local QuickLoad <name>
```

To define and configure QuickLoads for the current user, follow the step below:

- Select the User QuickLoads dialog tab on the User Preferences dialog box [809]. The User QuickLoads dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
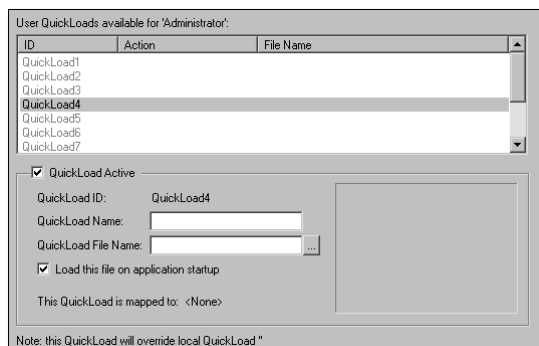
SEE ALSO

QuickLoads [175]
File> [378] QuickLoads>User QuickLoads [383]

9.123.5.1 User system QuickLoads available list box

Lists the available QuickLoads for the current user. Select a QuickLoad from the list available and then edit the settings using the controls in the QuickLoad Active group box [822].

Column	Description
ID	Displays the ID of the QuickLoad. QuickLoad files have ID's 1 through to 10. These correspond to the ten extended key actions that relate to the ten QuickLoads (`PPQuickLoad 1` through to `PPQuickLoad 10`).
Action	Corresponds to the string entered using the QuickLoad Name text box [823]. Provides a description of the job that the QuickLoad will load when actioned.
Filename	Filename of the job to be actioned (specified using the QuickLoad File Name text box and browse button [823]).

NOTE

The list of available QuickLoads may feature an entry highlighted in red. This indicates that the QuickLoad has been set to action when the CG Tools software is started. This is set using the Load this file on application start-up check box [822].

9.123.5.2 QuickLoad Active check box and group box

Check the QuickLoad Active check box to set the QuickLoad selected in the User system QuickLoads available list box [822] to active. You can subsequently configure the job that will be loaded when the QuickLoad is actioned [823], enter a description of the QuickLoad [823] (i.e. describe the job that will be loaded) and also configure that the selected QuickLoad will be actioned automatically [822] when the CG Tools software is started. This group box also displays the key combination [823] associated with the selected QuickLoad (if configured).

9.123.5.2.1 Load this file on application startup check box

To ensure that the job associated with the current QuickLoad is loaded automatically when the CG Tools software is started, ensure that the Load this file on application startup box is checked. The selected QuickLoad in the list is highlighted red.

9.123.5.2.2 Preview window

Previews the selected job associated with the current QuickLoad.

9.123.5.2.3 QuickLoad File Name text box and browse button

Enter the file path in the QuickLoad File Name text box of the job file that you want to associate with the current QuickLoad or select the Browse button and browse for the desired location and job file. If the browse button is selected, the Open Job dialog box [750] appears where you can browse and select the desired job file.

9.123.5.2.4 QuickLoad ID

```
<0-10>
```

Displays the numeric identification of the QuickLoad selected within the User system QuickLoads available list box [822].

9.123.5.2.5 QuickLoad Name text box

Enter a descriptive message for the current QuickLoad using the QuickLoad Name text box. This information appears in the Action column in the User system QuickLoads available list box [822].

9.123.5.2.6 This QuickLoad is mapped to <key combination>

Displays the key combination to which the selected QuickLoad is associated with. Key combinations can be associated with active QuickLoads by editing the current keyboard map using the Extended Key Editor dialog box [638].

There are ten extended key actions that relate to the ten QuickLoads (`PPQuickLoad 1` through to `PPQuickLoad 10`).

SEE ALSO

Local Preferences dialog box [696]
Keyboard dialog tab [718]
Extended Keyboard Mapping File box, Edit and Browse button [719]
Extended Keyboard Map dialog box [639]
Extended Key Editor dialog box [638]

9.123.6 Password dialog tab

The Password dialog tab enables the maintenance of password settings for the current logged in user. If the controls on this group box are unavailable (greyed out), then the user settings for the current logged in user are locked and cannot be updated with any changes. The following message will appear also at the bottom of the dialog tab:

```
Note: The users file is currently protected.
Only the system administrator can change the passwords.
```

Contact your system administrator for help in resolving this problem. If you are the system administrator, this situation may have occurred because a remote copy of the user list could not be located when starting the CG Tools software. This means that the cached version of the remote user settings have been loaded for the current session from the following the folder:

```
C:\Program Files\Pixel Power Ltd\CG Tools Config
```

These cached settings cannot be edited. You must either specify a new, valid location where the remote user settings can be located using the Remote user location text box and browse button [666] on the Users dialog tab [665] on the Global Preferences dialog box [654], or re-start the CG Tools software if the remote user settings could be not be located due to networking problems.

To configure user password options, follow the step below:

- Select the Password dialog tab on the User Preferences dialog box [809]. The Password dialog tab is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

823   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
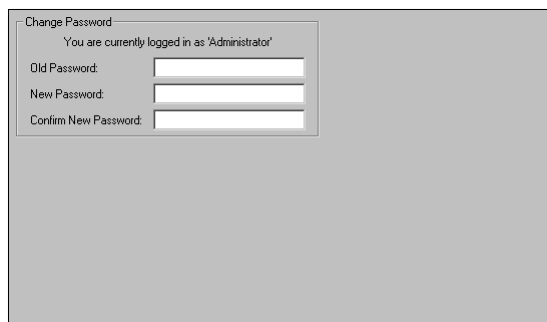
SEE ALSO

Users.xml [172]
Users.xml tag reference [172]
Remote and Local user management locations [137]
Global Preferences dialog box [654]
Users dialog tab [665]

9.123.6.1   Change Password group box

The controls in the Change Password group box enable the current user to change their current password [824] to a new password [824] and confirm [824].

9.123.6.1.1   Confirm Password text box

After entering a new Password using the New Password dialog box, confirm the new password by entering it in the Confirm Password dialog box.

9.123.6.1.2   New Password text box

After entering the current password in the Old Password text box, enter the new password in the New Password text box and confirm using the Confirm Password text box.

9.123.6.1.3   Old Password text box

To change the password for the current user, enter the current password in the Old Password text box, then enter a new password in the New Password text box [824].

9.124 Warning: Analysis of the associated files for this job has found problems dialog box

When opening a job that causes the CG Tools software to experience problems during loading, the Warning: Analysis of the associated files for this job has found problems dialog box is displayed.
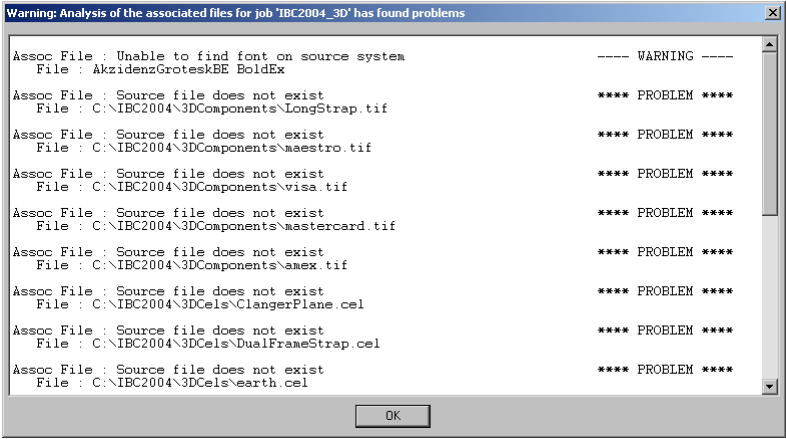
The circumstances that may cause the appearance of the dialog box include:

- Associated files that do not exist in the location referenced in the job header;
- Cannot find associated fonts on the source system;

Messages are split into two types; Warnings and Problems. This is indicated on the far right of the dialog for each error. Problems can be fixed using the Job Maintenance dialog box |686| (File> |378| Job Maintenance |383|) after the job has been loaded. Missing fonts, if experienced, can be installed using the after this box has been closed using the Font Waning dialog box |645|.

NOTE

You can control whether the validity of associated files is checked during the loading of jobs. Ensure that the Check Associated Files When Loading Jobs box |715| is checked on the General dialog tab |714| on the Local Preferences dialog box |696|. The presence of the correct fonts on the local system will still be checked, irrelevant of this setting and the Font Waning dialog box |645| may be displayed if required.

9.125 Warning !! - No YUV Video Hardware dialog box

The CG Tools software natively operates in the YUV colour space and therefore to ensure the best display and rendering performance during editing and software playout, it should be used on a machine that features a graphics display adapter that supports the YUV colour space. If this is not the case, after starting Clarity PREP, the Warning !! - No YUV Video Hardware dialog box is displayed

9.126 YUV Conversion Settings dialog box

Enables conversions between RGB and YUV colours and vice-versa. These colour conversions are used by the Pixel Power Adobe Photoshop plug-in. Also enables conversions to be tested.

- The YUV Conversion Settings dialog box is displayed by selecting Add or Edit on the Photoshop Connection Options dialog box 77 .
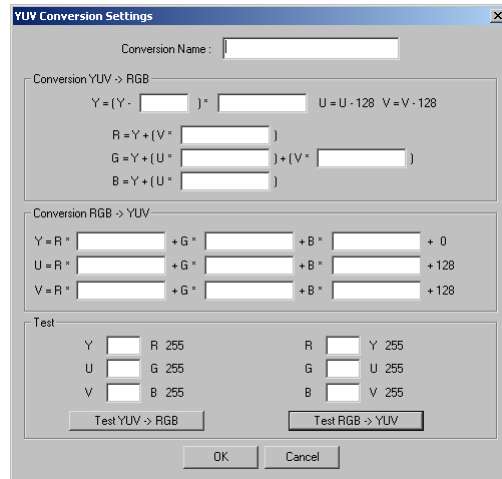
In normal circumstances, the four YUV conversion methods listed on the Photoshop Connection Options dialog box 77 should suffice in most circumstances and we do not recommend that you overwrite the values stored in each of these four conversion methods.

The values listed in the YUV Conversion Settings dialog box are loaded from the `YUV_RGB_Matrices.txt` file which is located in the `Subfiles` folder of your chosen installation folder e.g `C:\Program Files\Pixel Power Ltd\CG Tools 7.1\SubFiles`.

This file features the four default matrices as featured on the Photoshop Connection Options dialog box 77 ; any additional named matrices created using the YUV Conversion Settings dialog box are added to this file.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   826

Copyright © 2000-2006 Pixel Power Ltd.

Section 10

Hints and tips

10. Hints and tips

This section contains useful working information and will be expanded in due course with every release of the documentation when relevant.

Maintaining size and position when copying and pasting text pages 830

10.1 Maintaining position when copying and pasting text pages

Normally when using copy & paste within a text page layer, the X and Y coordinates are lost and you simply copy the characters. By not selecting any characters within the text page and being at the very start of the page, the software copies the entire layer by default. Follow the steps below for an example:

1. Open page 1 by double-clicking on the preview in the Page Browser 251. The page is opened in the Graphic Edit window 260.
2. A text page is created automatically. The text page is selected for editing. This is indicated by the green text cursor in the top left of the page.
3. Enter the text:

    ```
    Text Page 1
    ```
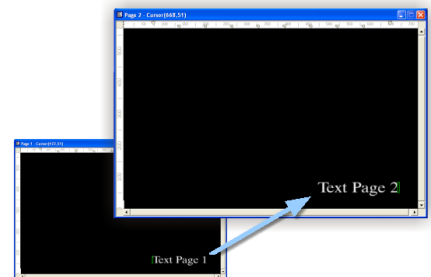
4. With the NUM LOCK function turned off on the numeric keypad, press left SHIFT + HOME to select the entire text page.
5. Whilst pressing and holding left CTRL + left ALT, press the arrow keys to move the text to suitable position.
6. Press Home to return to the start of the text page.
7. Press CTRL + C to copy the text page layer.
8. Press ESC to stop editing. The text page is pasted down into the foreground of the page using full filtering.
9. Add another page using Page> 390 Add New 391.
10. Open page 2 by double-clicking on the preview in the Page Browser. The page is opened in the Graphic Edit window 260.
11. A text page is created automatically. The text page is selected for editing. This is indicated by the green text cursor in the top left of the page.
12. Press ESC to stop editing.
13. Press CTRL + P to paste down the copied text page layer, maintaining its previous position.

Section 11

Supporting applications and tools
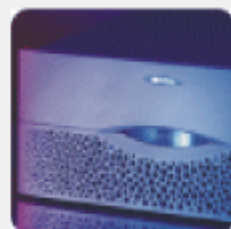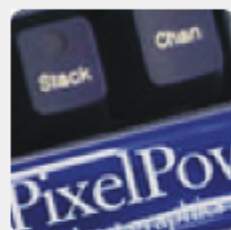
11. Supporting applications and tools

The following Pixel Power support/newsroom automation software applications are available.

Application	Description	Availability	
		Optional at extra cost	Part of the CG Tools suite
Active X Control	Front-end to the graphics database hosted on the Pixel Power Control Centre server. The ActiveX plug-in provides tight, visual integration of the graphics content of a newscast with the newsrooms' desktop working environment.	■	
Chyron Remote Control Server	Converts Chyron Infinite remote control protocol commands supplied via a serial communications port into Clarity DCOM network control calls.		■
Clarity Control Toolbox 836	The Clarity Control Toolbox delivers the quickest possible route to custom control interfaces for Clarity systems. It provides a toolset for the rapid development of customized user interfaces for lottery, elections, sports and game shows.	■	
Clarity COM 1008	Microsoft compatible COM object giving the ability to update data and control a Clarity system unit using the Clarity XML protocol. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
Clarity XML Serial Server	Application for parsing Clarity XML protocol commands via a serial port. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
Clarity XML Socket Server 1010	Application for parsing Clarity XML protocol commands via one or more TCP/IP sockets. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
iNews Active X Control	Front-end to the graphics database hosted on the Pixel Power Control Centre server. The ActiveX plug-in provides tight, visual integration of the graphics content of a newscast with the newsrooms' desktop working environment.	■	
Media Shop	Media Shop is a tool for converting between different formats of video and audio the results of which can be used with the CG Tools software.		■
Pixel Browser ASP Client	Utilises the graphics database and cached images that have been searched/created by the Pixel Power Control Centre and enables these searches to be defined and displayed by a client via Microsoft Internet Explorer.	■	

11. Supporting applications and tools

Pixel Power Control Centre (PPCC)	Provides core support for the integration of Pixel Power graphics systems with AP ENPS, AVID iNews, Dalet and other MOS enabled newsroom systems. The systems MOS gateway supports close integration of one or multiple Clarity systems with an ENPS-based newsroom, including the use of our Pixel Power ActiveX plug-in for ENPS within the newsroom desktops. The system also provides supporting services for the Pixel Power ActiveX plug-in for AVID iNews.	■	
Pixel Promo	Semi-customised software application that can be used in conjunction with Clarity character generators to automate channel branding and promotion. It imports data from a traffic system and batch builds promo page sequences based on pre-defined templates. The traffic data is searched according to a defined set of rules to automatically extract show titles and build multiple lineup bumpers.	■	
RapidRecall Keypad Server 1025	Communicates between a defined a physical RapidRecall Keypad or RapidRecall virtual keypad and a Clarity system unit being used for playout. The application has the facility to connect to physical keypads that are connected both via an ethernet network and via a serial port on the local host system. Included as part of the Automation interface [LICENSED] [CLARITY] 17 option.		■ (a) 835
RapidRecall virtual keypad 1030	Mimics a physical Version 2 RapidRecall Keypad and can be used to control the playout of the Clarity software on the same system or another Clarity system unit on the same network.		■

a.   (CG and GX derivatives only; optional for TG)

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

11.1   Clarity Control Toolbox

The Clarity Control Toolbox delivers the quickest possible route to custom control interfaces for Clarity systems. It provides a toolset for the rapid development of customized user interfaces for lottery, elections, sports and game shows. The Clarity Control Toolbox comprises a development environment, where the custom interface is built, and an expandable library of Clarity specific controls.

Simply by dragging and dropping controls onto a form, a customised Clarity user interface can be created in a matter of minutes. No programming knowledge is required as each control is configured by filling in a straightforward list of parameters.

The controls include simple trigger buttons, auto-updating text and picture fields as well as more sophisticated controls like the Ticker control, and can support a range of external data sources and connectivity.

Customised interfaces provide an optimum operational environment for specialist graphics requirements like game shows, information channels and sports events, but they have traditionally been slow and costly to develop. The Clarity Control Toolbox provides a cost effective route to creating a customized interface without requiring a software developer.
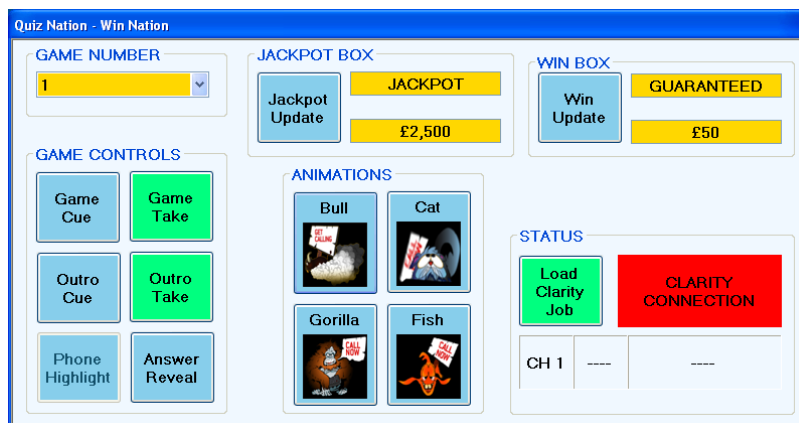
Because the software uses Microsoft .NET components in its design and production, it is a requirement that the .NET Framework is installed. This is completed as part of the Clarity Control Toolbox installation.

For more information on the Microsoft .NET Framework, see http://msdn.microsoft.com/netframework/gettingstarted/default.aspx.

After installation, the following resources are available.

Variable	Value
Executable	`Clarity Control Toolbox.exe`
Configuration	`Clarity Control Toolbox.exe.config`
Licence File*	`Clarity Control Toolbox.exe.lic`
Licence Agreement	`License.rtf`
Default Path	`C:\Program Files\Pixel Power Ltd\Clarity Control Toolbox`

* (created after enabling the software)

SEE ALSO

11.1.1   Applicable software version

This documentation applies to the following version of software:

Clarity Control Toolbox, Version 1.0.0.5

11.1.2   Overview

The follow sections are featured in the documentation:

Section	Description
Requirements |838⟩	Development platform |838⟩ and developer skill base |838⟩ requirements.
Licensing |838⟩	Information on how the Clarity Control Toolbox software is licensed.
Important information and concepts |840⟩	Important concepts surrounding the use of the Clarity Control Toolbox software application, including a theoretical example |842⟩ project and its deployment.
Installation and basics |848⟩	Explains how to install |848⟩ the Clarity Control Toolbox software, start the software |851⟩, configure the software licence code |851⟩, optionally create and share the recommended folder structure and optionally configure the Clarity XML Socket Server to start automatically.
Graphical User Interface (GUI) tour |854⟩	Describes the main GUI components and their purpose.
Menus |859⟩	Describes the available menu commands that can be selected when using the software.
Examples |870⟩	The CD-ROM containing the Clarity Control Toolbox software features one or more examples that you can load into the Clarity Control Toolbox and experiment with.
Dialog boxes |865⟩	Describes the available dialog boxes that can be displayed when using the software.
Control reference |881⟩	Describes in details the available controls that can be used to develop an application, along with available properties for each control.
Properties reference |963⟩	Describes in detail the properties available for configuration for the control set currently available.
Featured XML files, basic description and tag reference (where relevant) |1006⟩	Describes application files created after saving and building a project and provides an XML tag reference where relevant.

11.1.3 Requirements

The following software sections apply:

11.1.3.1 Development platform

The PC on which you are going to install the Clarity Control Toolbox should meet or exceed the following specification:

Component	Specification
Processor	2.4Ghz Pentium 4 processor or AMD equivalent.
System Memory	512 Mb.
Disk Space	At least 100Mb free space (this includes the installation of the Microsoft .NET Framework).
Operating System	Microsoft® Windows® XP Professional.
Storage	CD-ROM drive (necessary for Clarity Control Toolbox installation, if software is supplied on CD-ROM).
Connectivity	Ethernet 10/100/1000 (for the control of a Clarity system unit on the same Ethernet network).

11.1.3.2 Developer knowledge and skill base

The individual that will be developing applications using the Clarity Control Toolbox should:

a) have a good understanding of the CG Tools software (i.e. a super user) and the way in which template jobs are created;
b) have a basic understanding of Microsoft Windows programming principles.

11.1.4 Licensing

Licensing of the Clarity Control Toolbox is achieved using a licence code derived from the Machine Address Code (MAC) of the PC that will run the software.

A licence code enables only a SINGLE copy of the Clarity Control Toolbox to BUILD and RUN applications on a SINGLE designated development machine. If applications developed using the Clarity Control Toolbox are to be run on a machine other than the development machine, a non-running, unlicensed copy of the Clarity Control Toolbox software (including the Microsoft .NET Framework) should be installed to enable access the toolbox software library.

If you have obtained a copy of the Clarity Control Toolbox from Pixel Power for the purpose of demonstration and have not been given a valid licence code, you will not be able to build any applications. You will only be able to save out XML data that can be subsequently compiled, only after you have entered a valid licence key.

After you have purchased copy of the Clarity Control Toolbox software, to request a licence code, you must identify the MAC address of the PC 839 that will run the software and then email Pixel Power Technical Support with the address. After a short period of time, you should receive a reply containing the licence code.

The licence code will appear similar to the one shown below:

```
v1yo2jPIBkLtEmPdsdO/BV239JfJYXzk1EXWaWJVUK0=
```

To configure the software with a licence code, see Configuring the licence code 851.

SEE ALSO

Identifying the MAC address of the PC that will run the Clarity Control Toolbox software 839

11. Supporting applications and tools
Clarity Control Toolbox

11.1.4.1 Identifying the MAC address of the PC that will run the Clarity Control Toolbox software

To identify the Machine Address Code (MAC) of the PC that will run the software, follow the steps below:

1. Make sure that the network cable is plugged into the ethernet port on the wall and the back of the PC.
2. Select Start>Run. The Run dialog box appears.
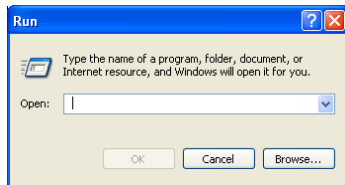
3. Type the following:

   `cmd`

4. Select OK. An MS-DOS window is displayed.
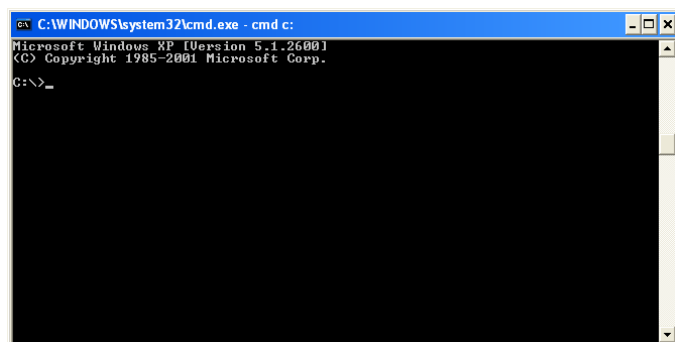
5. At the prompt (`C:\>`), type the following:

   `ipconfig/all`

6. Press Enter. You should now see screen output similar to the following:
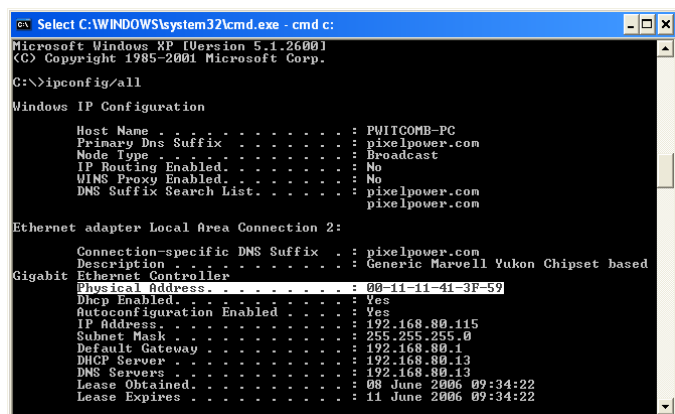
The MAC address can be referred to as HW (hardware), LAN (local area network), ethernet, adapter, or physical address. Notice the highlighted portion called physical address. The MAC address for the network card in this computer is:

`00-11-11-41-3F-59`

11.1.5 Important information and concepts

Please read the following sections before attempting to install ⌐848⌐ the Clarity Control Toolbox software.

Section	Description
Important important information regarding project development and deployment ⌐840⌐	Ensure that you read this section before using the Clarity Control Toolbox software.
Communication between the CG Tools software and built applications ⌐840⌐	Communication between the CG Tools software and applications built using the Clarity Control Toolbox software is achieved using the Clarity XML Socket Server application.
File types used by the Clarity Control Toolbox software ⌐840⌐	Details the file types used by the Clarity Control Toolbox software.
Recommended project folder structure ⌐841⌐	Recommendations on the structuring of project folders.
Recommendations for naming saved application projects and application data ⌐841⌐	Recommendations on project naming.
Example project development and deployment ⌐842⌐	Details a theoretical example project and its deployment.

11.1.5.1 Important important information regarding project development and deployment

Please note the following before continuing with the Clarity Control Toolbox software installation, project development and project deployment.

a) If you are going to use an application developed using the Clarity Control Toolbox software on one or more machines/system units other than the development system, you will need to install copies of the Clarity Control Toolbox software on those machines/systems. Is not a requirement for these copies of the software to be licensed. Compiled applications need access to the .NET Framework library and Clarity Control Toolbox .DLL library. See Installing the Clarity Control Toolbox software ⌐848⌐.

b) The development machine ⌐838⌐ can either be a standalone PC or a Clarity system unit. To enable testing of playout to be conducted easily, we recommend that the development machine is a Clarity system installed with the latest CG Tools software.

c) The development machine ⌐838⌐ must be installed with the Clarity COM object ⌐1008⌐.

d) A copy of the Clarity XML Socket Server ⌐1010⌐ software must be installed and be running on any Clarity system unit being controlled. See Communication between the CG Tools software and built applications ⌐840⌐.

11.1.5.2 Communication between the CG Tools software and built applications

Communication between the CG Tools software and applications built using the Clarity Control Toolbox software is achieved using the Clarity XML Socket Server application. The Clarity XML Socket Server application parses Clarity XML protocol commands via a TCP/IP socket between the CG Tools software and any software (either Pixel Power or third party) that wants to communicate with the CG Tools software using the Clarity XML protocol.

Please see the Clarity XML Socket Server ⌐1010⌐ section for information on starting and using the Clarity XML Socket Server.

11.1.5.3 File types used by the Clarity Control Toolbox software

The following file types are used by the Clarity Control Toolbox software:

Type	Description
.XML	All application project files and related application data files are saved using the XML file format and are stored in separate files with the .XML extension.
.Config	Configuration file for each saved project application XML file. Contains XML data relating to linked files for the project with the same name.
.EXE	Compiled application.

SEE ALSO

11. Supporting applications and tools

Clarity Control Toolbox

11.1.5.4   Recommended project folder structure

When creating a project, we recommend maintaining an organised filing structure. We recommend creating folder at the root or your development machines' hard disk with the name:

```
C:\ClarityControlToolbox\
```

Within this folder, you can copy Pixel Power when they become available. For your own projects, we recommend that you create a root project folder for each project that you create inside the `ClarityControlToolbox` folder. For example:

```
C:\ClarityControlToolbox\MyProject
```

You can then create a folder structure beneath a root project folder that will contain:

- all of the required resources, necessary for compilation and testing of the application;
- the CG Tools job and all related associated files required.

SEE ALSO

11.1.5.5   Recommendations for naming saved application projects and application data

Application projects and related application data saved using the Clarity Control Toolbox software is saved using the XML file format. When saving application projects and associated data, you should use a coherent naming convention:

a) when saving application project XML data, we suggest that you add the `Control` suffix to the filename.
b) when saving XML data sets using the , we suggest that you add the `Data` suffix to the filename.

This ensures that you do not get confused when opening XML files using the Clarity Control Toolbox software.

For example, in the picture shown below, the main application project is `Quiz Nation Control.xml` and the XML data set for the application project is named `Quiz Nation Data.xml`.
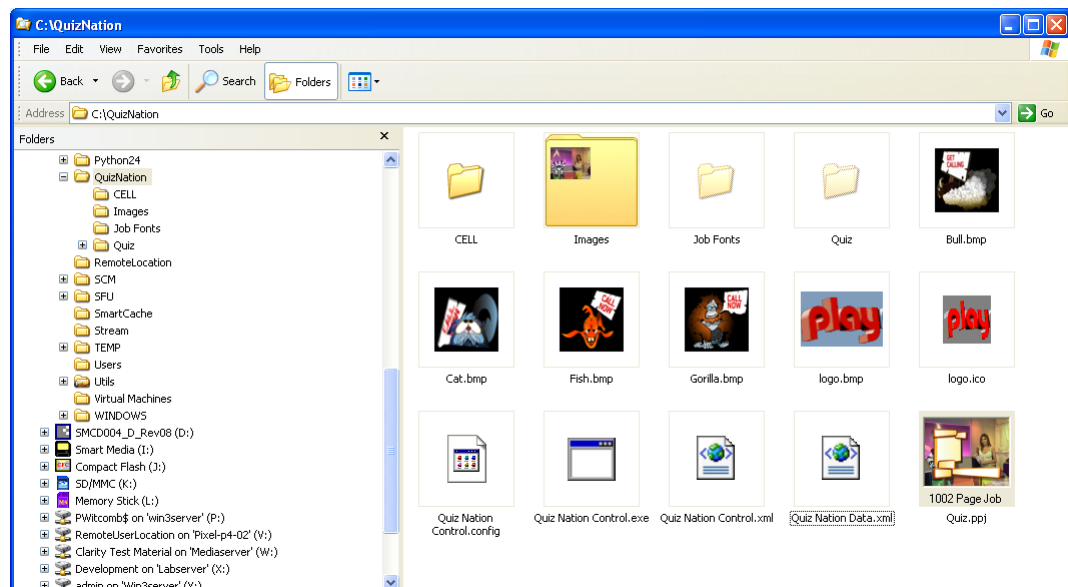
The compiled application (.EXE) is always named using the same name as the application project XML file (e.g. `Quiz Nation Control.exe`).

A configuration file each application project is always saved and maintained in the same folder (e.g. `Quiz Nation Control.config`). The file is named using the `.config` file extension and contains XML data relating to linked files for the project with the same name.

SEE ALSO

File> [859] Save [859]
File> [859] Save As [860]
File (XML Table Creator) [860]

11.1.5.6   Example project development and deployment

This section details a possible theoretical example project and its deployment. Three systems are used in the example.

The philosophy behind the is example is borne out of the requirement to develop, on the same system, an application using the Clarity Control Toolbox software and a CG Tools job that will be controlled by the application. This then enables playout and communication between the CG Tools software (Clarity) and the control application to then be tested locally before the job and controlling application are deployed on systems on the same ethernet network.

Type	Description	DNS Hostname
Graphical representation of example project development and deployment [843]	Diagram showing the role and relationship between each system.	N/A
Development and Testing Platform (Clarity system) (CLARITY_DEV) [844]	This machine is the platform tasked with the creation and testing of: • the application (`MyApp.exe`) that will control job (`MyJob.ppj`) playout on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*. • the CG Tools job (`MyJob.ppj`).	`CLARITY_DEV`
Playout Platform (Clarity system) (CLARITY_PLAYOUT) [845]	This machine is the platform tasked with: • the playout of the CG Tools job (`MyJob.ppj`) that will be controlled by `MyApp_Control.exe` on the *Control Platform (Standalone PC) (CONTROL_PC)*.	`CLARITY_PLAYOUT`
Control Platform (Standalone PC) (CONTROL_PC) [846]	This machine is the platform tasked with: • running the application (`MyApp.exe`) that will control job (`MyJob.ppj`) playout on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*.	`CONTROL_PC`

11.1.5.6.1   Graphical representation of example project development and deployment

11.1.5.6.2   Development and Testing Platform (Clarity system) (CLARITY_DEV)

This machine is the platform tasked with the creation and testing of:

- the application (`MyApp.exe`) that will control job (`MyJob.ppj`) playout on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*.
- the CG Tools job (`MyJob.ppj`).

The following software is installed on this system:

- CG Tools (Clarity) software;
- Clarity COM [1008];
- Licensed copy of the Clarity Control Toolbox software (including Microsoft .NET Framework);
- Clarity XML Socket Server [1010].

All application and job files are created in the following folder:

`C:\ClarityControlToolbox\MyProject`

Application development

Application is developed as per customer specification. As part of the `MyApp_Control.exe` application development process, four important files are created.

Folder or file		Description
MyProject	MyApp_Control.config	Configuration file that is created when the `MyApp_Control.xml` is first saved. It contains information regarding the location of the job that the application will control, the location of the `MyApp_Data.xml` file and information (DNS hostname, port numbers etc.) relating to the Clarity system that the application will control (e.g. `Localhost`). See <application name>.config [1006] for more information.
	MyApp_Control.exe	Compiled application that controls the playout of the CG Tools job (`MyJob.ppj`).
	MyApp_Control.xml	Application project XML data file used to store all information about the project including the form, all controls [881] and all property settings [963]. This file is loaded into the Clarity Control Toolbox software and compiled.
	MyApp_Data.xml	Optional application data file created using the XML Table Creator [858] that contains strings for drop down-down list boxes supplying page template field data.

Job development

Job is developed as per customer specification. As part of the `MyJob.ppj` application development process, the following files and folders are created.

Folder or file			Description
MyProject	Cell		Cel animation files for the CG Tools job.
	Images		Images for the CG Tools job.
	Job Fonts		Hidden folder containing jobs fonts for the `MyJob.ppj` CG Tools job.
	MyJob		Hidden folder named using the job name.
		Custom Animations	Custom animation files for the `MyJob.ppj` CG Tools job.
	MyJob.ppj		Job that will be controlled by the `MyApp_Control.exe` application.

Start Clarity XML Socket Server

Before testing, the Clarity XML Socket Server [1010] is started to facilitate subsequent communication between the CG

Tools software (Clarity) on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)* and the controlling application (`MyApp_Control.exe`).

Testing

Once the `MyApp_Control.exe` application has been built and the associated CG Tools job (`MyJob.ppj`) finished, testing can begin locally on the *Development and Testing Platform (Clarity system) (CLARITY_DEV)*.

The job is tested to ensure that playout and animation triggering function correctly when controlled locally by the connected keyboard. Once the job had been deemed to playout correctly, the `MyApp_Control.exe` application is tested to ensure that it runs correctly and connects with the host Clarity system via a local copy of the Clarity XML Socket Server. Connectivity is defined using the [Clarity] 886 control. Once connected, testing of job loading, playout control and triggering by the `MyApp_Control.exe` application can be achieved. Any errors experienced when controlling job loading, playout and triggering can be optionally logged as per the configured [Logging] 915 control.

SEE ALSO

11.1.5.6.3 Playout Platform (Clarity system) (CLARITY_PLAYOUT)

This machine is the platform tasked with:

* the playout of the CG Tools job (`MyJob.ppj`) that will be controlled by `MyApp_Control.exe` on the *Control Platform (Standalone PC) (CONTROL_PC)*.

The follow software is installed on this system:

* CG Tools (Clarity) software;
* Clarity XML Socket Server.

Copy job (MyJob.ppj) and associated files

After it has been deemed that all components function correctly on the *Development and Testing Platform (Clarity system) (CLARITY_DEV)*, the completed job (`MyJob.ppj`) and its associated files can be copied to the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)* using the CG Tools job copy mechanism.

To keep things consistent, all job files should be copied to the same project folder (`MyProject`) on the systems' hard disk, mirroring the location that the job was created in on the *Development and Testing Platform (Clarity system) (CLARITY_DEV)* e.g.

```
C:\ClarityControlToolbox\MyProject
```

Folder or file			Description
MyProject	Cell		Cel animation files for the CG Tools job.
	Images		Images for the CG Tools job.
	Job Fonts		Hidden folder containing jobs fonts for the `MyJob.ppj` CG Tools job.
	MyJob		Hidden folder named using the job name.
		Custom Animations	Custom animation files for the `MyJob.ppj` CG Tools job.
	MyJob.ppj		Job that will be controlled by the `MyApp_Control.exe` application.

Test job loading

After the job and all associated files have been copied, a quick test is then conducted to check that the job loads correctly without reporting any missing associated files, fonts etc. This should be the case if the job copy mechanism was configured correctly.

Start Clarity XML Socket Server

After testing, the Clarity XML Socket Server is started to facilitate subsequent communication between the CG Tools software (Clarity) on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)* and the controlling application on the *Control Platform (Standalone PC) (CONTROL_PC).*

NOTE

To enable the Clarity XML Socket Server to be started automatically when the system is started, you can include the [Clarity XML Socket Server shortcut in the Startup program group](#) ⌐853⌐.

11.1.5.6.4   Control Platform (Standalone PC) (CONTROL_PC)

This machine is the platform tasked with:

- running the application (`MyApp_Control.exe`) that will control job (`MyJob.ppj`) playout on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*.

The follow software is installed on this system:

- non-running, unlicensed Clarity Control Toolbox software (including Microsoft .NET Framework), enabling `MyApp_Control.exe` to access the toolbox software library.

Copy application (MyApp_Control.exe), configuration file (MyApp_Control.config) and XML data file (MyApp_Data.xml)

After it has been deemed that all components function correctly on the *Development and Testing Platform (Clarity system) (CLARITY_DEV)*, the control application (`MyApp_Control.exe`), the `MyApp_Control.config` [configuration file](#) ⌐1006⌐ and the `MyApp_Data.xml` file can then be copied to the *Control Platform (Standalone PC) (CONTROL_PC).*

To keep things consistent, all application files should be copied to the same project folder (`MyProject`) on the systems' hard disk, mirroring the location that the application was created in on the *Development and Testing Platform (Clarity system) (CLARITY_DEV)* e.g.

`C:\ClarityControlToolbox\MyProject`

Folder or file		Description
MyProject	MyApp_Control.config	Configuration file that is created when the `MyApp_Control.xml` is first saved. It contains information regarding the location of the job that the application will control, the location of the `MyApp_Data.xml` file and information (DNS name, port numbers etc.) relating to the Clarity system that the application will control (e.g. `Localhost`). See [<application name>.config](#) ⌐1006⌐ for more information.
	MyApp_Control.exe	Compiled application that controls the playout of the CG Tools job (`MyJob.ppj`).
	MyApp_Data.xml	Optional application data file created using the [XML Table Creator](#) ⌐858⌐ that contains strings for down-down list boxes supplying page template field data.

Edit configuration file (MyApp_Control.config) with details of the Playout Platform (Clarity system) (CLARITY_PLAYOUT)

The `MyApp_Control.config` configuration file stores information for the application (.EXE) with the same filename (`MyApp_Control.exe`). Basically, any control that references an external file or folder is listed as well as details of any [Clarity](#) ⌐886⌐ and [Logging](#) ⌐915⌐ controls. A hypothetical file for this example is shown below:

```
<configuration version="1.0">
   <loadJobButton1>
        <add key="JobName" value="C:\ClarityControlToolbox\MyProject\MyApp.ppj"/>
   </loadJobButton1>
   <dropDownListToFields1>
        <add key="XmlDataFile" value="C:\ClarityControlToolbox\MyProject\MyApp_Data.xml
   "/>
   </dropDownListToFields1>
   <clarity1>
        <add key="HostName" value="localhost"/>
        <add key="AutoReconnectInterval" value="5000"/>
```

```
            <add key="PortNumber" value="10220"/>
            <add key="FeedbackPortNumber" value="10221"/>
            <add key="AutoReconnect" value="False"/>
    </clarity1>
    <logging1>
            <add key="LogFileDirectory" value="C:\ClarityControlToolbox\MyProject"/>
    </logging1>
</configuration>
```

In order for the application (`MyApp_Control.exe`) to control job (`MyJob.ppj`) playout on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*, rather then the local system, the following the tags need to be edited:

a)   the `HostName` tag should be edited:

```
<add key="HostName" value="clarity_playout"/>
```

All other settings can be left the same. The file is then saved.

Ensure Clarity XML Socket Server is running on Playout Platform (Clarity system) (CLARITY_PLAYOUT)

Before attempting to control job (`MyJob.ppj`) playout, the Clarity XML Socket Server 1010 MUST be running to facilitate subsequent communication between the CG Tools software (Clarity) on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)* and the controlling application (`MyApp_Control.exe`).

Start application (MyApp_Control.exe) and control job (MyJob.ppj) playout on the Playout Platform (Clarity system) (CLARITY_PLAYOUT)

Once the `MyApp_Control.config` configuration file has been configured, the `MyApp_Control.exe` application located in `C:\ClarityControlToolbox\MyProject` is started. It is recommended practice for a desktop or Start menu shortcut to be created. The available controls on the application are then used to load the job (`MyJob.ppj`), cue and take pages and trigger animations on pages contained in `MyJob.ppj` on the *Playout Platform (Clarity system) (CLARITY_PLAYOUT)*. Any errors experienced when controlling job loading, playout and triggering are logged as per the configured Logging 915 control.

11.1.6 Installation and basics

Please read the following sections before attempting to use the Clarity Control Toolbox software.

Section	Description
Installing the Clarity Control Toolbox software 848	Describes how to install the Clarity Control Toolbox software.
Starting the Clarity Control Toolbox application 851	Describes how to start the Clarity Control Toolbox software.
Configuring the licence code 851	Describes how to optionally configure the licence code to enable full project development.
Creating and sharing the recommended project folder structure (OPTIONAL) 852	Describes how to optionally create and share the recommended project folder structure 841.
Ensuring the Clarity XML Socket Server is started automatically (OPTIONAL) 853	Describes how to optionally ensure that the Clarity XML Socket Server is started automatically when the current system started.

11.1.6.1 Installing the Clarity Control Toolbox software

To install the Clarity Control Toolbox software, follow the steps below:

1. If you are installing from CD-ROM, insert the installation media supplied to you and wait until the splash screen appears.

Press any key to continue.

Click on the relevant link to begin installing the software. The installation starts.

Alternatively, run the SETUP.EXE program located in the `Install\ClarityControlToolbox` folder on the CD-ROM.

11. Supporting applications and tools
Clarity Control Toolbox

If you have downloaded the software from our website, locate the above folder in the location where you unzipped the files and then run SETUP.EXE.

2. Because the software uses Microsoft .NET components in its design and production, it is a requirement that the .NET Framework is installed. After reading the licence agreement, select Accept to accept the terms and conditions of the agreement and begin the installation. **This part of the installation will not be shown if the .NET Framework is already installed.**
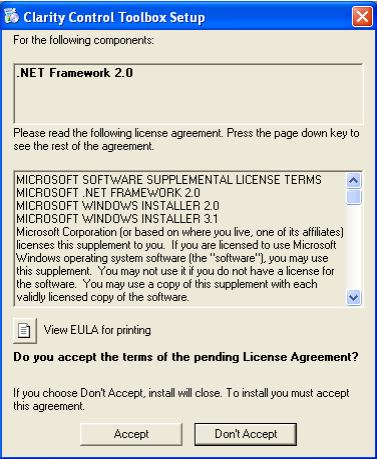
The following screen is displayed, showing the progress of the .NET Framework installation. The installation will take some time. Please be patient.
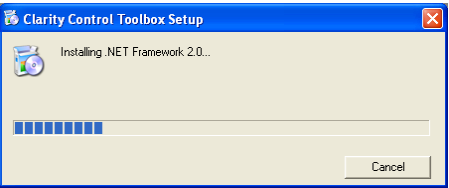
After the. NET Framework install is complete, the following screen is displayed:

3. Select Next to start the Clarity Control Toolbox installation.
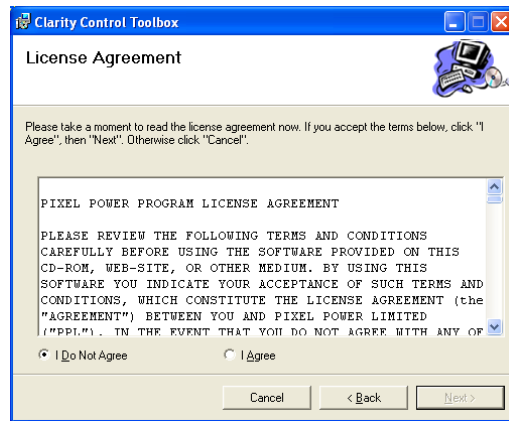
4.   Read the licence information, then select I Agree if you agree to the terms and conditions of the licence agreement. Select Next to continue.
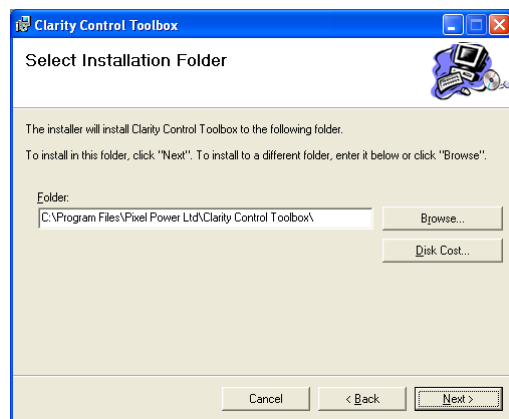
5.   Select Next to accept the default installation path or select Browse to navigate to a location where you want to install the software. To view hard disk space requirements, select Disk Cost.
6.   Select Next.
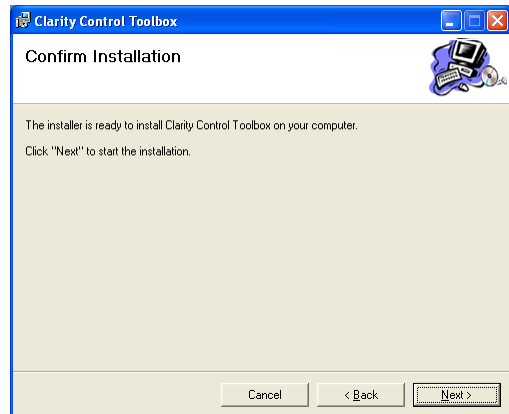
7.   To confirm the installation, select Next. The software is installed.
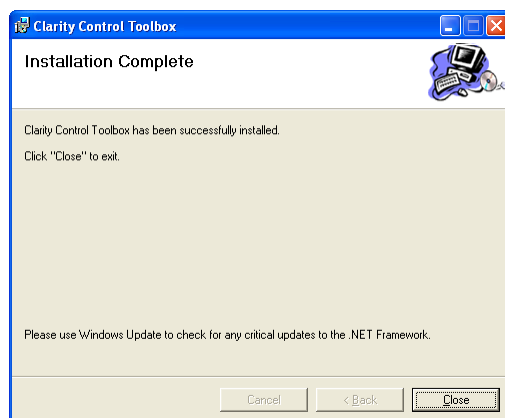
8.   Select Close to complete the installation.

NOTE

This installation installs the Microsoft .NET Framework. Please ensure that you use Windows Update to check for any critical updates to the .NET Framework. For more information on the Microsoft .NET Framework, see http://msdn. microsoft.com/netframework/gettingstarted/default.aspx.

11.1.6.2   Starting the Clarity Control Toolbox application

To start the Clarity Control Toolbox application, follow the step below:

1.   Select Start>All Programs>Pixel Power Ltd>Clarity Control Toolbox. The Clarity Control Toolbox application is started. You can also start the application from the Clarity Control Toolbox desktop shortcut icon.
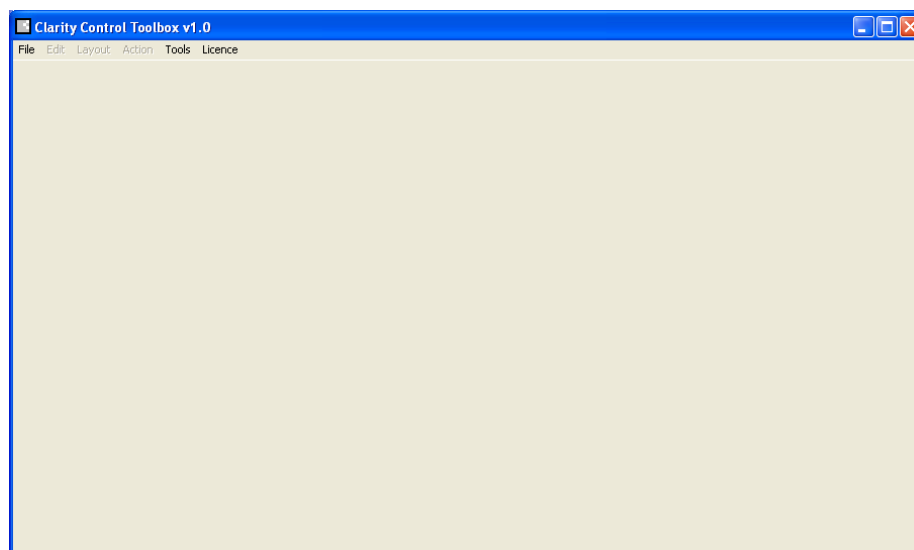
You can start using the software straight away. If you have purchased a licensed copy of the software, we recommend that you configure the licence string 851 immediately to enable the full software functionality.

11.1.6.3   Configuring the licence code (OPTIONAL)

If you have installed the Clarity Control Toolbox software on one or more machines/system units expressly to enable applications to run that are created using the software , it not a requirement for these copies of the software to be licensed as such this step is not required. For development machines, you must identify the MAC address of the PC 839 that will run the software and then email Pixel Power Technical Support with the address. After a short period of time, you should receive a reply containing the licence code.

To configure the Clarity Control Toolbox software with the licence code that you have received from Pixel Power Technical Support that was derived from the MAC address, follow the steps below:

1. Ensure that the Clarity Control Toolbox application is started on the system with the same MAC address as that used to derive the licence code.
2. Copy the licence code from the email using the CTRL + C key combination.
3. Select Licence>Add Licence. The Clarity Control Toolbox dialog box [865] is displayed.
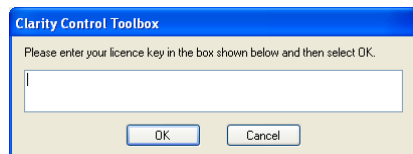
4. Paste the licence code into the text box using the CTRL + V key combination.
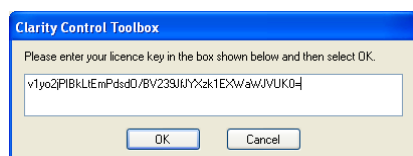
5. Select OK to accept the licence code. The follow message is displayed if the licence code is valid.
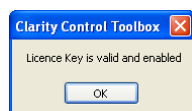
6. If the licence code not valid, then the following message is displayed.
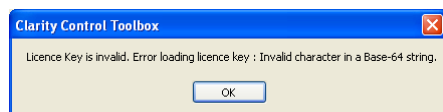
Please check that you have enter/copied the licence code correctly. If you still have problems, please contact Pixel Power Technical Support [103] for assistance.

11.1.6.4 Creating and sharing the recommended project folder structure (OPTIONAL)

The creation and sharing of a project folder that is mirrored on all machines helps make application and job deployment much easier. To optionally create and share the recommended project folder structure [841], follow the steps below:

1. Browse the local hard disk using Windows Explorer.
2. With the folder structure for the local hard disk viewed within Windows Explorer, right-click in the right-hand pane and select New>Folder from the shortcut menu.
3. Enter a new folder name e.g. `ClarityControlToolbox`.
4. Right-click on the `ClarityControlToolbox` folder and select Sharing and Security. The Properties dialog box is displayed with the Sharing dialog tab selected.
5. Select the Share This Folder option.
6. Leave the Share Name as `ClarityControlToolbox`.
7. Add a comment if desired using the Comment text box.
8. Set the User limits as desired (we recommend using the default Maximum allowed setting).
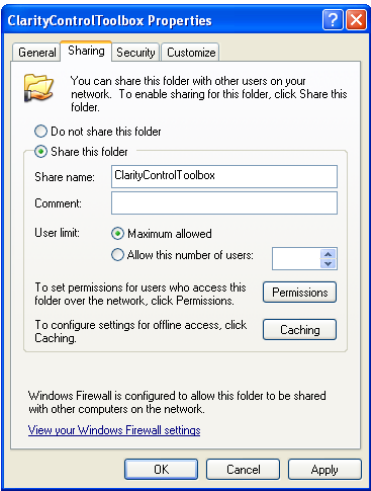
9. Select the Permissions button. The Permissions dialog box is displayed. By default, Microsoft Windows will configure the shared folder to have read-only access and you will have to manually define write permissions for the folder to enable files to be written and read.
10. Ensure that the Everyone user type is selected in the Group or user names list box.
11. Ensure that the Full Control, Change and Read boxes are set to Allow.
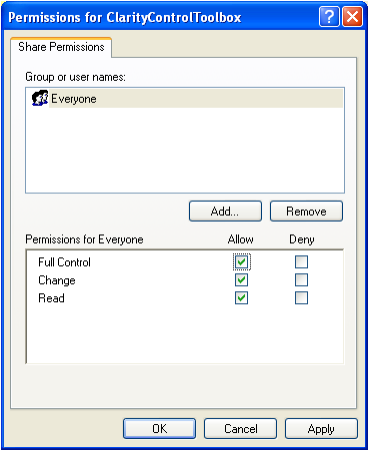
12. Select OK to close the Permissions dialog box and return to the Properties dialog box.
13. Select OK to close the Properties dialog box. Notice now that the `ClarityControlToolbox` folder displays that it is a shared folder by a change of icon.

11.1.6.5   Ensuring the Clarity XML Socket Server is started automatically (OPTIONAL)

The Clarity XML Socket Server 1010 is used to facilitate communication between the CG Tools software (Clarity) and the controlling application created using the Clarity Toolbox software. To optionally ensure that the Clarity XML Socket Server is started automatically when the current system started, you can optionally place the XML Socket Server shortcut in the Windows Startup program group. See Ensuring the Clarity XML Socket Server is started automatically (OPTIONAL) 1011 for more information.

11.1.7   Graphical User Interface (GUI) tour

This section explains details of the GUI components. Below is a typical working view showing the main GUI components.

Click on a balloon to find out more (online documentation only).
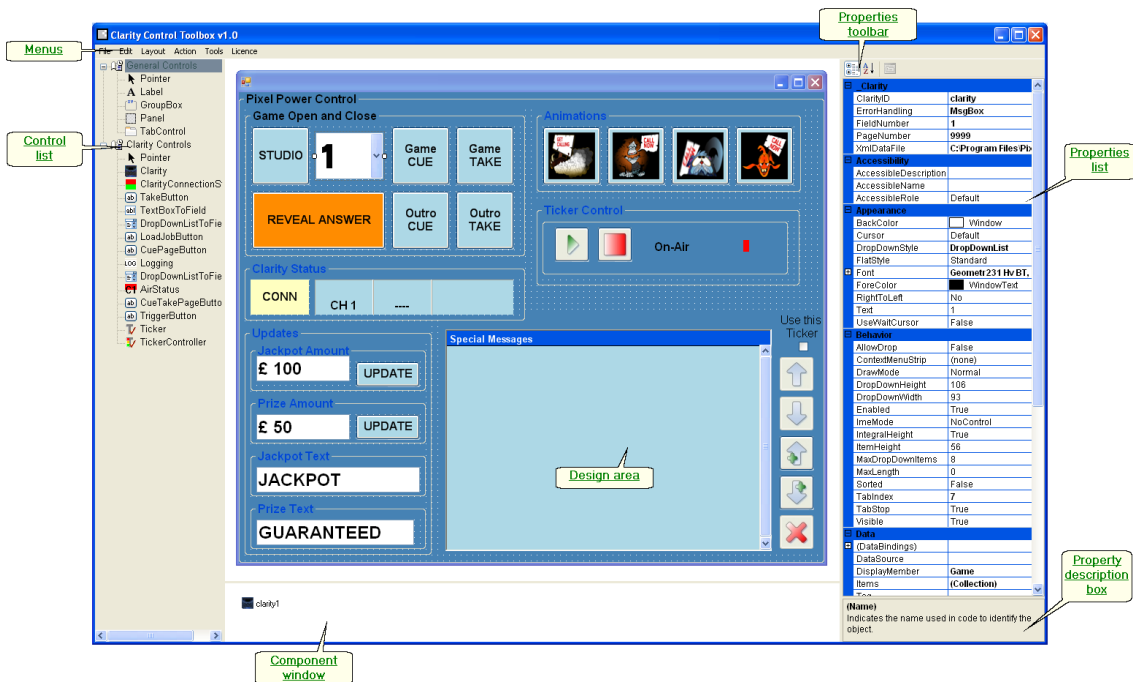
SEE ALSO

11.1.7.1   Component window

Lists instances of the Clarity 886 and Logging 915 controls present for the current project. The Component window only appears when an instance of a Clarity 886 or Logging 915 control is dragged onto the current project form. These controls are listed here because they inherently vital to the operation and debugging of the complied application.
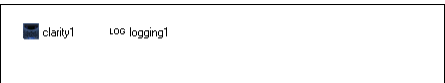
Selected controls in the Component window can be deleted if required but you must take care as deleted controls and associated properties cannot be recovered. Properties for the selected Clarity 886 or Logging 915 control can be configured using the Properties list 857 and Properties description box 856.

NOTE

The Clarity 886 or Logging 915 controls never appear graphically on the project form in the Design area 855; they only appear in the Component window.

11.1.7.2 Control list

Lists the controls available to the user. The available controls are split into two extensible groups. To expand a group to see the available controls, click on the +/- icon next to the group name.

11.1.7.2.1 General controls

General controls are those that are inherent to most programming applications (e.g. Microsoft Visual Studio etc.) and provide access to basic GUI design components for the current project form.

NOTE

General controls may be named differently within other Microsoft Windows based programming applications.

SEE ALSO

11.1.7.2.2 Clarity controls

Clarity controls are those that provide access to Clarity specific functionally. They are totally specific to the Clarity Control Toolbox development environment.

SEE ALSO

11.1.7.3 Design area

Displays the current project form and enables the construction of the projects' GUI contained on the project form. This area is inherent to most visual based programming applications (e.g. Microsoft Visual Studio etc.). Controls are placed on the current project using either the standard drag-and-drop method or by double-clicking on the selected control⌐881⌐ in the Control list⌐855⌐. Controls placed on the project form can be selected and manipulated using the mouse.

- Using commands in the File menu⌐859⌐, project forms can be created, opened and saved.
- Using commands in Layout⌐861⌐ menu, a selected control or group of controls on the current project form can be aligned⌐862⌐, centred⌐862⌐, layered⌐863⌐ and sized⌐862⌐ as well having the Tab order⌐863⌐ configured (the order in which focus is assigned to the control).

855   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

- Using commands in the <u>Edit menu</u> ⌐860⌐, controls on the current project form can be <u>selected</u> ⌐861⌐, <u>cut</u> ⌐861⌐, <u>copied</u> ⌐861⌐ and <u>pasted</u> ⌐861⌐ as well as deleted in the standard Windows manner.

Below is a typical working view showing all of the available controls on a project form within the Design area.

Click on a balloon to find out more (online documentation only).
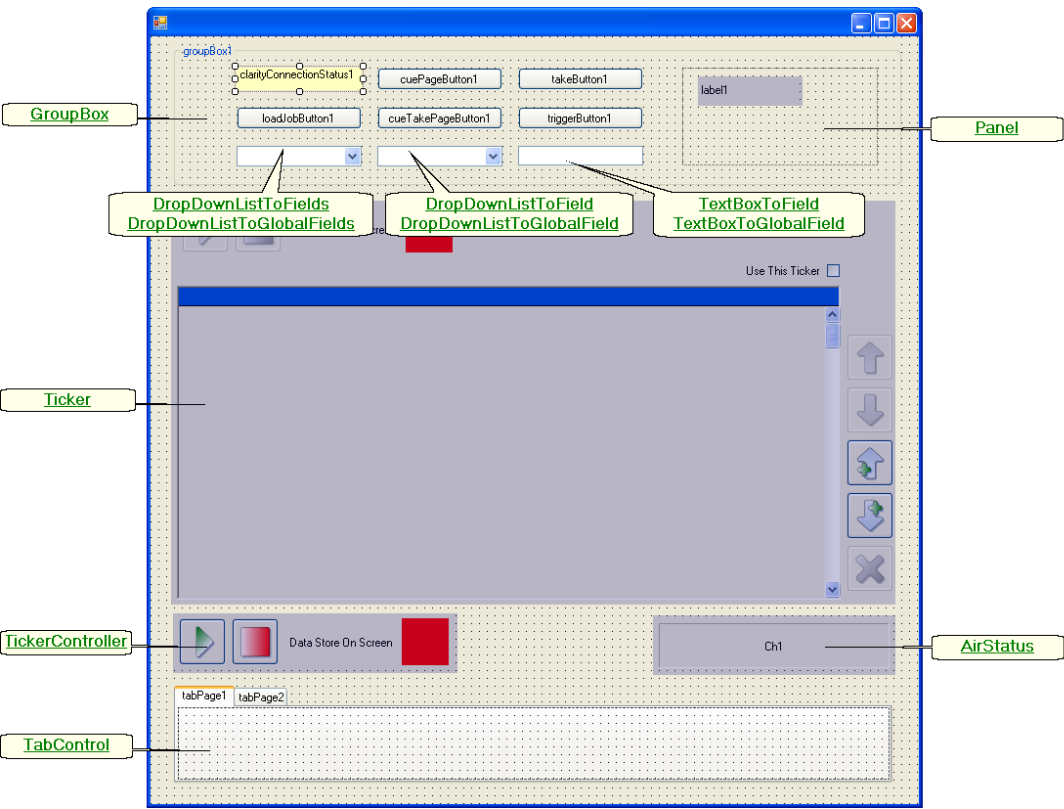
NOTE

Properties for the current project form in the Design area and any selected controls can be configured using the <u>Properties list</u> ⌐857⌐ and <u>Properties description box</u> ⌐856⌐.

SEE ALSO

<u>Control reference</u> ⌐88⌐
<u>Properties references</u> ⌐963⌐

11.1.7.4   Property description box

Shows the property name and a short description of the property selected in the <u>Properties list</u> ⌐857⌐.

On occasions when a <u>TabControl</u> ⌐920⌐ control is selected on the current from in the <u>Design area</u> ⌐855⌐, an additional box is displayed above the Property description box, enabling the addition or removal of tabs. This is addition to using the <u>TabPage Collection Editor dialog box</u> ⌐869⌐.

SEE ALSO

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   856

Copyright © 2000-2006 Pixel Power Ltd.

Properties list 857
Properties toolbar 857

11.1.7.5 Properties list

Lists the available properties for the selected control on the current project form open in the Design area 855. The properties available for the selected control are grouped relating to their function. Property groups can be collapsed or extended using the +/- icon next to a property group heading. Any properties that fall within that group are then shown below. Furthermore, if a property within a group has any sub-properties that are available for configuration, they can be collapsed or extended using the +/- icon next to a property heading.

Collapsed

Extended

There are up to ten property groups available for configuration depending on the control selected in the Design area 855.

SEE ALSO

Properties reference 963

11.1.7.6 Properties toolbar

Enables the configuration of how properties are displayed in the Properties list 857.

Tool	Tool name	Description
	Categorized	Lists all properties for the selected control by category. In this mode, when you are able to expand or collapse a list, you will see a plus (+) or minus (-) to the left of the category name.
	Alphabetically	Alphabetically lists all properties for the selected object that can be changed at design time, as well as their current settings.

857 CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

11.1.7.7   XML Table Creator

Enables XML data sets (tables) to be created and then saved. These are similar to data stores available in the CG Tools software. XML data sets are expressly for use with the Ticker |929ȿ control, enabling ticker data to be supplied. The XML Table Creator is displayed or hidden using the Tools> |863ȿXML Table Creator |864ȿ command.
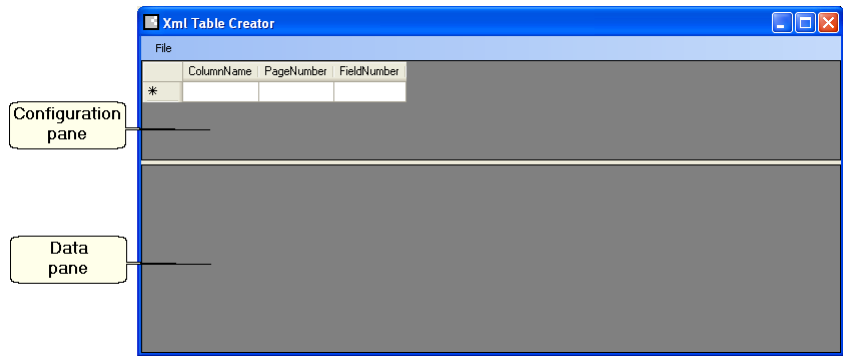
The XML Table Creator GUI is split into two sections. The top half (Configuration pane) enables the configuration (column name, page number and field number) of table columns listed in the bottom half; the bottom half (Data pane) enables data to be inserted into those columns defined in the Configuration pane.

The concept of the XML Table creator is to:

a)   create one or more columns which are linked to a page number and then a page template field marker on that page;

b)   link an instance (a row) of data or a file path for each available column.

Once a table has been created and XML data has been configured, the XML data set can be saved as an XML file using the File> |859ȿSave |860ȿ or File> |860ȿSave As |860ȿ commands. Saved XML data can be opened for editing using the File> |860ȿOpen |860ȿ command. If you want to start over and replace the current data set, use the File> |860ȿ New |860ȿ command.

In the example shown below, five columns have been created within the Configuration pane using the Column Name column. Each column name is linked to a single template page in a Clarity job (9999) using the PageNumber column. Each column name is linked to a different page template field marker on page 9999 using the FieldNumber column.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   858

Copyright © 2000-2006 Pixel Power Ltd.
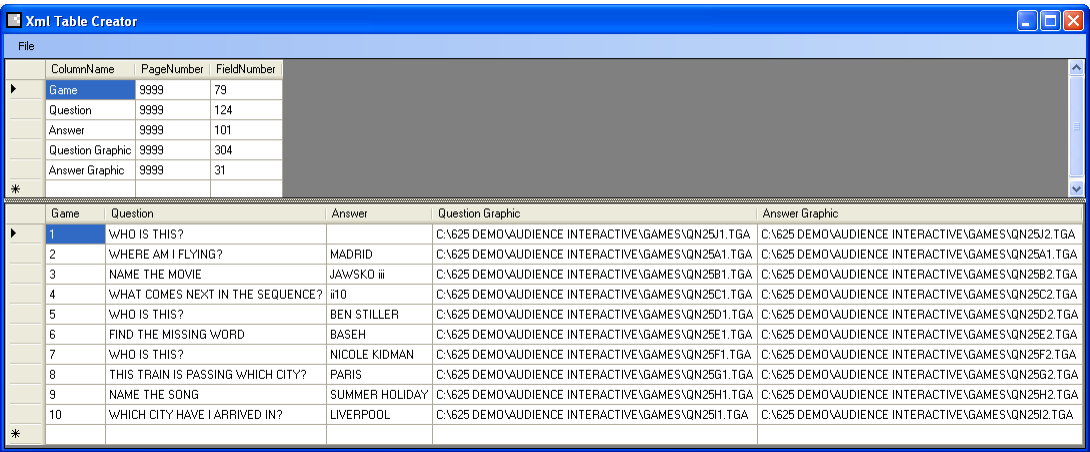
11. Supporting applications and tools

11.1.8 Menus

The following menus are available in the CG Tools software. New or edited menus since the last release are highlighted with dark grey shading.

Name	Purpose	Availability		
		No project open	Project open + no valid licence	Project open + valid licence
File 859	General software operations including new 859, open 859, save 859 and save as 860 well as software exit 860	■	■	■
Edit 860	Editing for projects including MS Windows standard cut 861, copy 861 and paste 861 actions as well as the deletion 861 and selection 861 of all design controls.	■	■	■
Layout 861	Enables control over layout of project components including alignment, centering, sizing, tab order and z order.		■	■
Action 863	Enables the building and running of projects.			■
Tools 863	Enables editing of XML data supplied to controls via a table editor.		■	■
Licence 864	Enables control over software licensing.	■	■	■

11.1.8.1 File

Back to Menus home 859.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
New 859					
Open 859					
Save 859					
Save As 860					
Exit 860					

11.1.8.1.1 New

Create new project and close the project currently open. You will be prompted to save changes if the current project is unsaved and the Save As dialog box 868 will be displayed.

11.1.8.1.2 Open

Open existing project from disk.

Displays the Open dialog box 867.

11.1.8.1.3 Save

Save project with current name if already named. If the project has not been saved, performs the same as File> 859 Save As 860 and displays the Save As dialog box 868.

11.1.8.1.4 Save As

Save job with new name if already named.

Displays the Save As dialog box 868.

11.1.8.1.5 Exit

Close the Clarity Control Toolbox application. You will be prompted to save changes if the current project is unsaved and the Save As dialog box 868 will be displayed.

11.1.8.2 File (XML Table Creator)

Back to Menus home 859.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
New 860					
Open 860					
Save 860					
Save As 860					

11.1.8.2.1 New

Create new XML data set and close the XML data set currently open. You will be prompted to save changes if the current XML data set is unsaved and the Save As dialog box 868 will be displayed.

11.1.8.2.2 Open

Open existing XML data set from disk.

Displays the Open Job dialog box 867.

11.1.8.2.3 Save

Save XML data set with current name if already named. If the XML data set has not been saved, performs the same as File> 860 Save As 860 and displays the Save As dialog box 868.

11.1.8.2.4 Save As

Save XML data set with new name if already named.

Displays the Save As dialog box 868.

11.1.8.3 Edit

Back to Menus home 859.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
Cut 861		Left CTRL + X			

Command		Keyboard Shortcut	Tool	Availability	Conditions
Copy 861		Left CTRL + C			
Paste 861		Left CTRL + V			
Delete 861		DELETE			
Select All 861		Left CTRL + A			

11.1.8.3.1 Cut

Cut selected project controls(s) currently selected in Design area 855 to the Windows Clipboard.

Left CTRL + X

11.1.8.3.2 Copy

Copy selected project controls(s) currently selected in Design area 855 to the Windows Clipboard.

Left CTRL + C

11.1.8.3.3 Paste

From the Windows Clipboard, paste selected project controls(s) into the from open in the Design area 855.

Left CTRL + V

11.1.8.3.4 Delete

Delete selected project controls(s) currently selected in the Design area 855.

Left DELETE

11.1.8.3.5 Select All

Select all project controls currently present on the form in the Design area 855.

Left CTRL + A

11.1.8.4 Layout

Back to Menus home 859.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
Align 862					
Centre 862					
Size to 862					
Z Order 863					
Tab Order 863					

861   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

11.1.8.4.1　Align

Left

Aligns selected project controls with the left edge of the first control that was selected in the group.

Right

Aligns selected project controls with the right edge of the first control that was selected in the group.

Top

Aligns selected project controls with the top edge of the first control that was selected in the group.

Bottom

Aligns selected project controls with the bottom edge of the first control that was selected in the group.

Middle

Aligns selected project controls horizontally with the vertical centre of the first control that was selected in the group.

Centre

Aligns selected project controls vertically with the horizontal centre of the first control that was selected in the group.

To Grid

Aligns selected project controls with the grid shown in the Design area 855 .

11.1.8.4.2　Centre

Horizontal

Horizontally centres the selected project controls within the confines of the project form OR the GroupBox 911 containing the selected controls.

Vertically

Vertically centres the selected project controls within the confines of the project form OR the GroupBox 911 containing the selected controls.

11.1.8.4.3　Size to

Control

Sizes the vertical and horizontal dimensions of selected project controls using the dimensions of first control that was selected in the group.

Control Width

Sizes the horizontal dimension of selected project controls using the dimensions of first control that was selected in the group.

Control Height

Sizes the vertical dimension of selected project controls using the dimensions of first control that was selected in the group.

11. Supporting applications and tools

11.1.8.4.4 Z Order

Bring to front

Bring selected project control(s) to the front of the foreground control order.

Send to back

Send selected project control(s) to the back of the foreground control order.

11.1.8.4.5 Tab Order

Bring to front

Bring selected project control(s) to the front of the TAB order.

Send to back

Send selected project control(s) to the back of the TAB order.

11.1.8.5 Action

This menu is only available if you are running a fully licensed copy of the software. See Licensing [838] for more information.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
Build [863]					
Build and Run [863]					

11.1.8.5.1 Build

This menu is only available if you are running a fully licensed copy of the software. See Licensing [838] for more information.

Build current project. An executable (.EXE) with same name as the project XML file will be created in the same folder.

11.1.8.5.2 Build and Run

This menu is only available if you are running a fully licensed copy of the software. See Licensing [838] for more information.

Build and then run the current project. An executable (.EXE) with same name as the project XML file will be created in the same folder. The file is then run.

11.1.8.6 Tools

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
XML Table Creator 864					

11.1.8.6.1   XML Table Creator

Displays the XML table creator 858 where an XML data set can be created, loaded or saved.

11.1.8.7   Licence

Back to Menus home 859.

New or edited menu commands since the last release are highlighted with dark grey shading. This menu features the following commands:

Command		Keyboard Shortcut	Tool	Availability	Conditions
Add Licence 864					

11.1.8.7.1   Add Licence

Enables the entry of the licence code supplied by Pixel Power Technical Support that enables the building of applications. Displays the Clarity Control Toolbox dialog box 865.

11.1.9 Dialog boxes

New or edited dialog boxes since the last release are highlighted with dark grey shading.

Name	Description
Clarity Control Toolbox dialog box ⌐865¬	Enables the entry of the licence string.
Font dialog box ⌐865¬	Enables font selection or font attribute configuration.
Format String dialog box ⌐866¬	Enables the formatting of strings entered using the String Collection Editor dialog box ⌐868¬.
Open (Generic) dialog box ⌐867¬	Displayed when general file selection is required.
Save As (Generic) dialog box ⌐868¬	Displayed when general file saving is required.
String Collection Editor dialog box ⌐868¬	Enables the entry of strings for selection by the user when the application is built and run.
TabPage Collection Editor dialog box ⌐869¬	Enables configuration of the selected TabControl ⌐920¬ control on the current form in the Design area ⌐855¬.

11.1.9.1 Clarity Control Toolbox dialog box

Enables the entry of the licence string that you have received from Pixel Power Technical Support. To display the Clarity Control Toolbox dialog box, follow the steps below:

- Select Licence> ⌐864¬Add Licence ⌐864¬. The Clarity Control Toolbox dialog box is displayed.
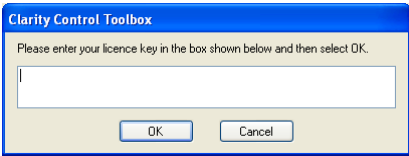
Enter the licence string into the text box.

SEE ALSO

Licensing ⌐838¬
Identifying the MAC address of the PC that will run the Clarity Control Toolbox software ⌐839¬
Configuring the licence string ⌐851¬

11.1.9.2 Font dialog box

Enables font selection or font attribute configuration. To display the Font dialog box, follow the steps below:

- Select the ⌐...¬ Browse button on an available property ⌐963¬ in the Properties list ⌐857¬. The Font dialog box is displayed.
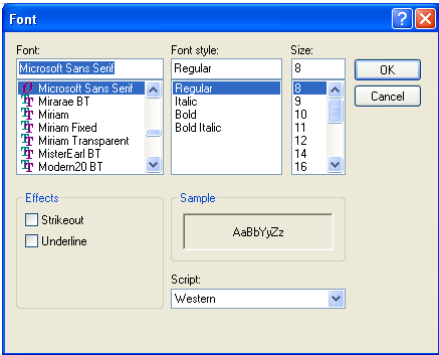
CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

SEE ALSO

> Clarity> 963 DataOnScreenLabelFont 956
> Clarity> 963 GridCaptionFont 935
> Clarity> 963 GridHeaderFont 937
> Clarity> 963 InternalControllerDataOnScreenLabelFont 941

11.1.9.3 Format String dialog box

Enables the formatting of strings entered using the String Collection Editor dialog box 868. To display the Format dialog box, follow the step below:

- Select the [...] Browse button on the Misc> 1004 FormatString property in the Properties list 857. The Format String dialog box is displayed.

  To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
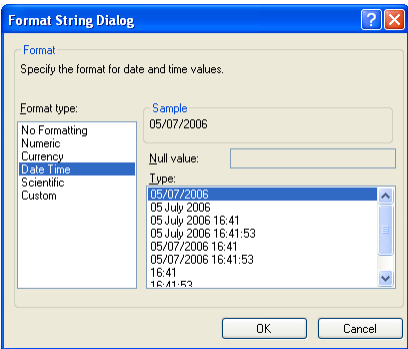
SEE ALSO

Misc> 1004 FormatString

11.1.9.3.1 Custom Format group box

Only displayed when Custom is selected from the Format type list box 866.

Enables the entry of a custom format string.

NOTE

A custom string may require extra handling

11.1.9.3.2 Decimal Places text box

Only displayed when Numeric, Currency or Scientific is selected from the Format type list box 866.

Enables the definition of the number of decimal places to show for the value.

11.1.9.3.3 Format type list box

Enables the selection of the format type for the string. The following format types are available:

Type	Description	Row specifier
No Formatting	Use no formatting to display the value from the source with no adornment.	A
Numeric	Specify the format for numbers. The Decimal Places text box 866 is displayed.	B
Currency	Specify the format for monetary values. The Decimal Places text box 866 is displayed.	C

Type	Description	Row specifier
Date Time	Specify the format for date and time values. The <u>Type list box</u> 867 is displayed.	D
Scientific	The number is converted to a string of the form –d.ddd…E+ddd or –d.ddd…e +ddd, where each 'd' indicates a digit (0-9). The string starts with a minus sign if the number is negative. One digit always precedes the decimal point. The precision specifier indicates the desired number of digits after the decimal point. If the precision specifier is omitted, a default of six digits after the decimal point is used. The case of the format specifier indicates whether to prefix the exponent with an 'E' or an 'e'. The exponent always consists of a plus or minus sign and a minimum of three digits. The exponent is padded with zeros to meet this minimum, if required.	E
Custom	A custom numeric format string, which you create and consists of one or more custom numeric format specifiers, defines how numeric data is formatted.	F

NOTE

The row specifier values can be entered directly into the <u>Misc></u> 1004 FormatString property in the <u>Properties list</u> 857 if desired, thus negating the need to display the Format String dialog box if configuration is not required.

SEE ALSO

Please see the following MSDN topic for more information on string formatting types:

http://msdn2.microsoft.com/en-us/library/fbxft59x.aspx

11.1.9.3.4 Null Value text box

To be completed at a later date.

11.1.9.3.5 Sample group box

Displays a sample of the selected format.

11.1.9.3.6 Type list box

Only displayed when the Date Format is selected from the <u>Format type list box</u> 866.

Enables the selection of a data and time format for the selected string. A sample for the selected type is shown in the <u>Sample group box</u> 867.

11.1.9.4 Open (Generic) dialog box

The generic Open dialog box is displayed when general file selection is required.

1. To display files of all types, select All Files from the Files of Type drop-down list box.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006
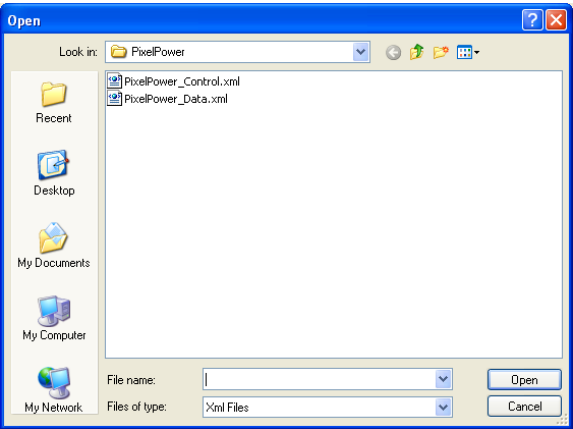
2. Browse to location where the file is located.
3. Select the desired file.
4. Select Open to open the selected file and return to the application or launching dialog box.

11.1.9.5   Save As (Generic) dialog box

The generic Save As dialog box is displayed when general file saving is required.
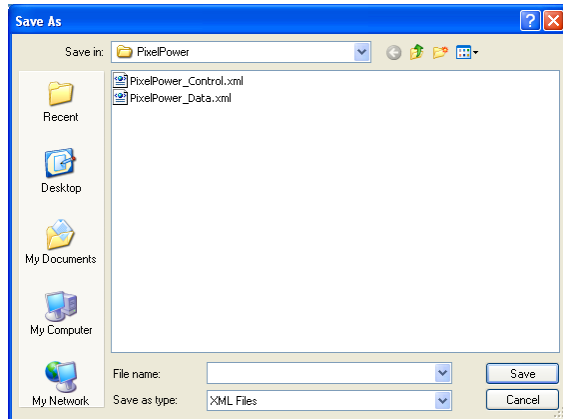
1. To display files of all types, select All Files from the Files of Type drop-down list box.
2. Browse to a new location or where an existing file is located.
3. Select the desired file or enter a new name in the File name text box.
4. Select Save to save and return to the application or launching dialog box.

11.1.9.6   String Collection Editor dialog box

Enables the entry of strings for selection by the user when the application is built and run. To display the String Collection Editor dialog box, follow the step below:

*   Select the [...] Browse button on the Data> [1001] Items property or the Misc> [1004] AutoCompleteCustomSource in the Properties list [857]. The String Collection Editor dialog box is displayed.
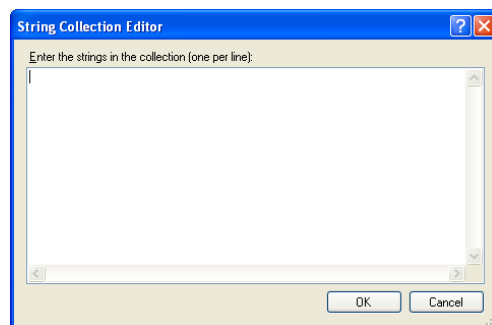
Enter the string in the list box, ensuring that each string is separated by a carriage return.

SEE ALSO

Data> [1003] Items
Misc> [1004] AutoCompleteCustomSource

11.1.9.7 TabPage Collection Editor dialog box

Enables configuration of the selected TabControl 920 control on the current form in the Design area 855. This can also be achieved using the various properties 963 in the Properties list 857. Also enables tabs to be re-ordered, added or removed. To display the TabPage Collection Editor dialog box, follow the steps below:

- Select the [...] Browse button on the Behavior> 1001 TabPages property 963 in the Properties list 857. The TabPage Collection Editor dialog box is displayed.

    To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
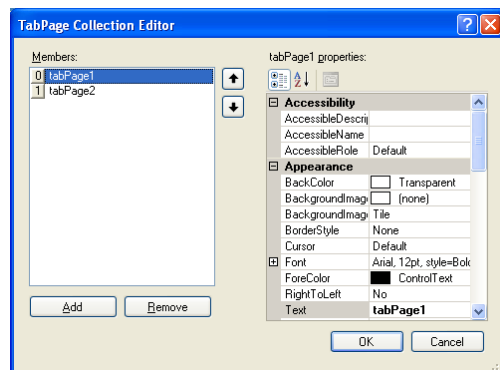
11.1.9.7.1 <Order> buttons

Move the display order of the selected tab in the Members list box 869 using the <Order> buttons adjacent to the Members list box. This affects the order of the tab shown on the selected TabControl 920 control on the current form in the Design area 855.

11.1.9.7.2 Add button

Select the Add button to add a new tab control to the Members list box 869.

11.1.9.7.3 Members list box

Lists the tabs currently available in the selected TabControl 920 control.

11.1.9.7.4 Properties list box

Lists the available properties from the select tab in the Members list box 869. The Properties list box operates in the same manner as the main Properties list 857 on the GUI.

11.1.9.7.5 Properties toolbar

Enables the configuration of how properties are displayed in the Properties list box 869. Mirrors the same functions as the Properties toolbar 857 on the main GUI.

11.1.9.7.6 Remove button

Select the Remove button to remove the selected tab control in the Members list box 869.

869   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

11.1.10 Examples

The CD-ROM or ZIP file containing the Clarity Control Toolbox software features one or more examples that you can load into the Clarity Control Toolbox and experiment with. Examples are located in the following folder on the CD-ROM or within the ZIP file:

```
\ClarityControlToolbox
```

Within this folder are sub-folders, each containing the following:

- Clarity Control Toolbox application source XML files;
- Built application (.exe);
- CG Tools job that the built application will control, along with any job related resources such as custom animations, fonts, cel animations and images.

At present the following examples are available:

Example	Location
Basic application [871]	ClarityControlToolbox\BasicControl
Quiz application [879]	ClarityControlToolbox\QuizNation

To ensure that the examples load into the Clarity Control Toolbox software correctly and the related CG Tools job loads into the Clarity software correctly, you must copy the `\ClarityControlToolbox` folder to the root of the system hard disk on the development machine hosting the Clarity Control Toolbox software e.g.

```
C:\ClarityControlToolbox\
```

NOTE

You must be logged in on the Clarity system with administrator privileges to ensure that the files can be accessed by all other users.

SEE ALSO

Recommended project folder structure [841]

11.1.10.1 Before using an example

Please read the following before running an example application:

1. Whilst logged into the Clarity system with administrator privileges, ensure that the contents of the relevant example folder have been copied to the following location:

   ```
   C:\ClarityControlToolbox\<example folder name>
   ```

2. Ensure that the latest version of the Clarity COM object [1008] has been installed.
3. Ensure that CG Tools version 7.1.1.9 or later is installed and started on the host Clarity system (`localhost`).
4. Ensure that the CG Tools software is configured to operate in:

   625 line video format (using the Video Format drop-down list box [795] in the System Settings group box [794] on the SD Hardware Configuration dialog box [786]);
   4:3 aspect ratio (using the Aspect Ratio group box [791] on the Chan A/B dialog tab [790] on the SD Hardware Configuration dialog box [786]).

5. Ensure that the latest version of the Clarity XML Socket Server [1010] is installed, is started [1010] on the host Clarity system, is configured correctly [1013] and has connected [1012] to the CG Tools software.
6. Ensure that XML (Show XML check box [1015]) and XML Feedback (Show XML Feedback check box [1015]) is being shown by the Clarity XML Socket Server [1010]. This enables connection and channel status to be monitored.

11.1.10.2   Basic application (BasicControl)

A simple application, created to control and update a single page Clarity job.
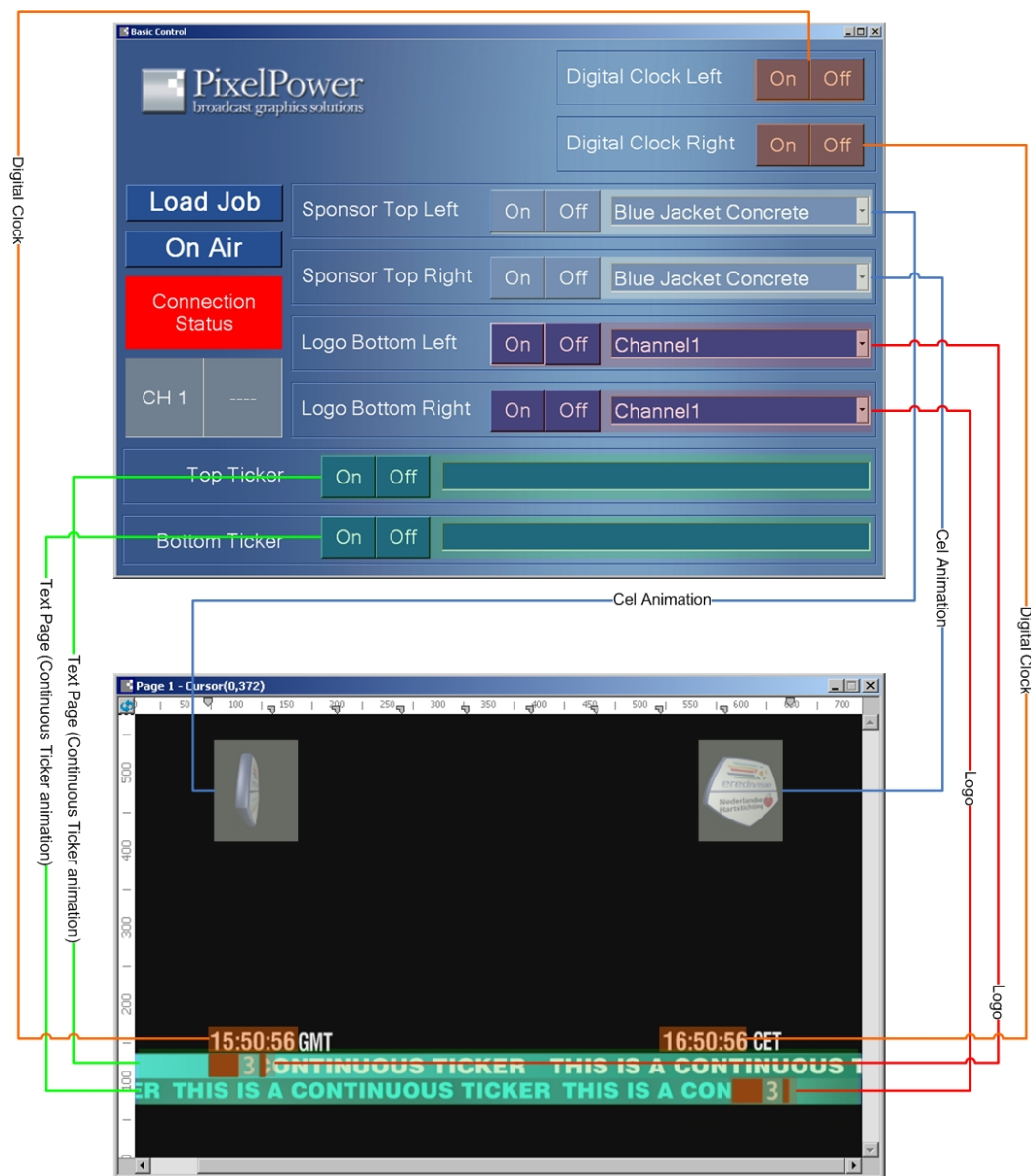
SEE ALSO

11.1.10.2.1   Folder structure

The following table documents the folder structure of the example:

Folder or file		Sub folder and Description	
BasicControl	Cels	Cel animation files for the `BasicControl.ppj` CG Tools job.	
	Job	`BasicControl.ppj`	CG Tools job.
		Job Fonts	Hidden folder containing job fonts for the `BasicControl.ppj` CG Tools job.
		BasicControl	Custom Animations
			Folder containing any potential custom animations.
	Logos	Logos for the `BasicControl.ppj` CG Tools job.	
	XML Files	Folder containing XML data created using the [XML Table Creator](#) 858 .	
		`BasicControlField1.xml`	XML data for field 1 in the job.
		`BasicControlField2.xml`	XML data for field 2 in the job.
		`BasicControlField3.xml`	XML data for field 3 in the job.
		`BasicControlField4.xml`	XML data for field 4 in the job.
	BasicControl.config	Configuration file for the `BasicControl.xml` application.	
	BasicControl.exe	Built application that will control the `BasicControl.ppj` CG Tools job.	
	BasicControl.xml	XML data file used to define the `BasicControl` application form.	

11.1.10.2.2   Application description

The following section details the various parts of the basic application (`BasicControl.xml`).
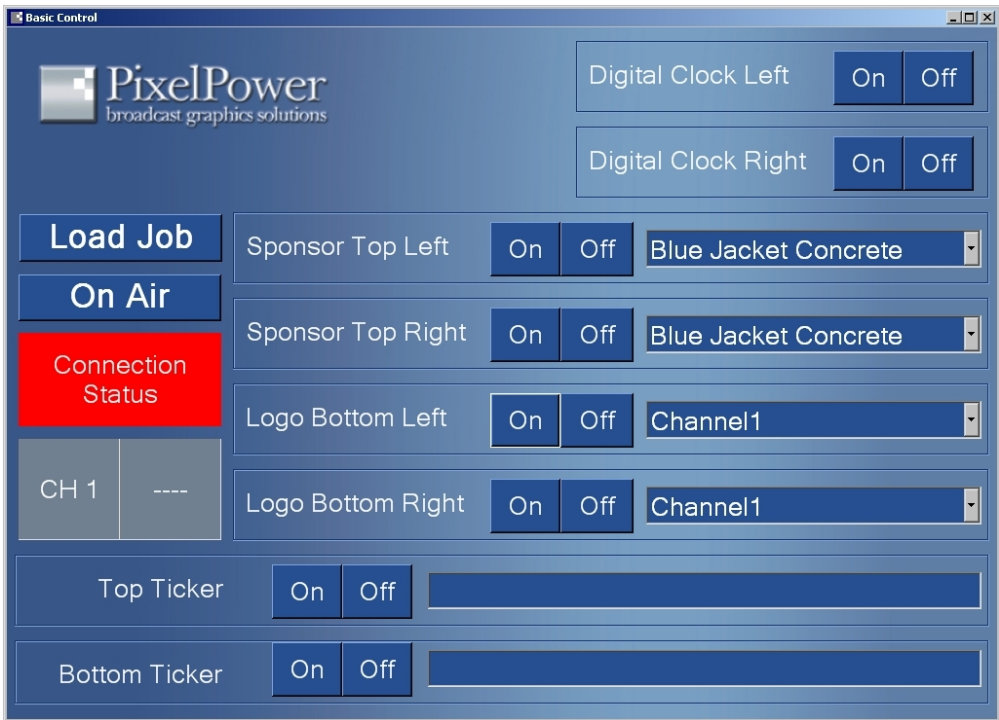
Project settings

A [Clarity control](#) [886] is placed on the form. This defines the Clarity system that the application will communicate with. It is configured with the following settings:

Property	Value	Description
[AutoReconnect](#) [887]	`False`	Do not reconnect automatically to the defined Clarity system.
[FeedbackPortNumber](#) [889]	`10221`	Defines the feedback port number on the connected [Clarity](#) [886] system. This port is used to monitor/receive feedback commands via a copy of the [Clarity XML Socket Server](#) [1010] on the local Clarity system.
[ClarityID](#) [884]	1	Internally referenced name of an available Clarity control. This is referenced by all other controls that communicate with the connected Clarity system.
[ErrorHandling](#) [885]	`None`	No error handling (no requirement for the insertion of a [Logging](#) [915] control).
[HostName](#) [890]	`localhost`	Connect to the CG Tools software on the local [Clarity](#) [886] system that is running `BasicControl.exe`.
[PortNumber](#) [890]	`10220`	Defines the transmit port number on the local [Clarity](#) [886] system. This port is used to transmit commands to a copy of the [Clarity XML Socket Server](#) [1010] on the local Clarity system.

Main form

The main form contains all controls. An image has been defined as the background of the form using the [Appearance](#) [1000]>BackgroundImage property. The title bar text for the application is set to `Basic Control` using the [Appearance](#) [1000]>Text property. A grid is defined and snapping enabled using the [Design>](#) [1003]DrawGrid and [Design>SnapToGrid](#) [1003] properties respectively.

Load Job button

This button is a [LoadJobButton](#) [913] control. It loads the `Job\BasicControl.ppj` job (defined using the [JobName](#) [914] property) on the connected Clarity system referenced with the ID of 1 (defined using the [ClarityID](#) [884] property).

On Air button

This button is a [CueTakePageButton](#) [897] control. It puts the connected Clarity system referenced with the ID of 1 (defined using the [ClarityID](#) [884] property) online, cues channel 1 (defined using the [ChannelNumber](#) [883] property) and then takes page 1 in the job (defined using the [PageNumber](#) [896] property).

Connection Status box

This is a [ClarityConnectionStatus](#) [891] control. It displays the connection status of the connected Clarity system referenced with the ID of 1 (defined using the [ClarityID](#) [884] property). Shows Red ([DisconnectedColor](#) [892]) when disconnected and Green ([ConnectedColor](#) [892]) when the `BasicControl.exe` is connected with the CG Tools software on the current Clarty system (`localhost`) via the [Clarity XML Socket Server](#) [1010]. Ensure that XML ([Show XML check box](#) [1015]) and XML Feedback ([Show XML Feedback check box](#) [1015]) is being shown by the [Clarity XML Socket Server](#) [1010]. This enables connection and channel status to be monitored.

CH1 box

This is an [AirStatus](#) [882] control. It displays the channel status of the connected Clarity system referenced with the ID of 1 (defined using the [ClarityID](#) [884] property). The channel that is being monitored is channel 1 (defined using the [ChannelNumber](#) [883] property). The control shows three colours for the differing channel states. Shows Red ([StoppedColor)](#) [886] when the channel is stopped, Amber ([BusyColor)](#) [883] when busy (basically when a page is being prepared) and Green ([ReadyColor)](#) [885] when the channel is ready (e.g. for a page to be cued and taken). Ensure that XML ([Show XML check box](#) [1015]) and XML Feedback ([Show XML Feedback check box](#) [1015]) is being shown by the [Clarity XML Socket Server](#) [1010]. This enables connection and channel status to be monitored.

Digital Clock Left and Digital Clock Right

Two [GroupBox](#) [911] controls have been inserted. Each [GroupBox](#) [911] control contains a [Label](#) [912] control, which is configured using the [Appearance](#) [1000]>Text property to `Digital Clock Left` and `Digital Clock Right` respectively.

Each group box contains two [TriggerButton](#) [960] controls. Each [TriggerButton](#) [960] control references the Clarity system with the ID of 1 (defined using the [ClarityID](#) [884] property). The channel number that each [TriggerButton](#) [960] will control

is channel 1. This is configured using the ChannelNumber |883¬ property.

The respective On buttons trigger each of the digital clocks in the job to display if they are currently hidden. They are named internally as `triggerLClockOn` and `triggerRClockOn` using the Design> |1003¬Name property. Their respective screen names (`On`) are defined using the Appearance |1000¬>Text property. The respective trigger key that will action the referenced digital clock to display is set to T (`triggerLClockOn`) and Y (`triggerRClockOn`) using the TriggerLetter |962¬ property.

The respective Off buttons trigger each of the digital clocks in the job to hide if they are currently displayed. They are named internally as `triggerLClockOff` and `triggerRClockOff` using the Design> |1003¬Name property. Their respective screen names (Off) are defined using the Appearance |1000¬>Text property. The respective trigger key that will action the referenced digital clock to hide is set to 5 (`triggerLClockOff`) and 6 (`triggerRClockOff`) using the TriggerLetter |962¬ property.

Sponsor Top Left and Sponsor Top Right

Two GroupBox |911¬ controls have been inserted. Each GroupBox |911¬ control contains a Label |912¬ control, which is configured using the Appearance |1000¬>Text property to `Sponsor Top Left` and `Sponsor Top Right` respectively.

Each group box contains two TriggerButton |960¬ controls and a DropDownListToFields |903¬ control. Each TriggerButton |960¬ controls references the Clarity system with the ID of 1 (defined using the ClarityID |884¬ property). The channel number that each TriggerButton |960¬ will control is channel 1. This is configured using the ChannelNumber |883¬ property.

The respective On buttons trigger the cel animation currently loaded to display if the cel animation is currently hidden. They are named internally as `triggerSponserTopLeftOn` and `triggerSponserTopRightOn` using the Design> |1003¬Name property. Their respective screen names (`On`) are defined using the Appearance |1000¬>Text property. The respective trigger key that will action the referenced cel animation to display is set to 7 (`triggerSponserTopLeftOn`) and 8 (`triggerSponserTopRightOn`) using the TriggerLetter |962¬ property.

The respective Off buttons trigger the cel animation currently loaded to hide if the cel animation is currently displayed. They are named internally as `triggerSponserTopLeftOff` and `triggerSponserTopRightOff` using the Design> |1003¬Name property. Their respective screen names (Off) are defined using the Appearance |1000¬>Text property. The respective trigger key that will action the referenced cel animation to hide is set to U (`triggerSponserTopLeftOff`) and I (`triggerSponserTopRightOff`) using the TriggerLetter |962¬ property.

The respective drop-down list boxes (DropDownListToFields) |903¬ enable the selection of a different cel animation to display. They are named internally as `dropDownListToFields1` and `dropDownListToFields2` using the Design> |1003¬Name property. The page number (1) and field number (1 or 2) that each drop-down list box will update is defined using the PageNumber |896¬ and FieldNumber |902¬ properties respectively. Both the list items and the paths to new cel animations are defined using the XML file that is referenced by the XmlDataFile |905¬ property. The `dropDownListToFields1` control references the `BasicControlField1.xml` file in the `BasicControl\XML Files` folder; the `dropDownListToFields2` control references the `BasicControlField2.xml` file. These XML files were created using the XML Table Creator |858¬.

Each XML file contains data sets (columns of data). Each column is named using the `ColumnName` column. The page number (1) and field number (1 or 2 depending on which file is opened) that is to be updated with new data is defined in the `PageNumber` and `FieldNumber` columns respectively for the `SponsorGraphic` data set.

The `SponsorName` data set is the list of names shown by the respective DropDownListToFields |903¬ control. This data is configured to be shown in each list using the Data> |1003¬DisplayMember. The `SponsorGraphic` data set is the list of file paths that reference alternative cel animations stored in the `BasicControl\Cels` folder. When a name (`SponsorName`) is selected from a drop-down list, the cel animation referenced in the adjacent position in the

`SponsorGraphic` data set replaces that currently being displayed.

Logo Bottom Left and Logo Bottom Right

Two GroupBox ⌐911⌐ controls have been inserted. Each GroupBox ⌐911⌐ control contains a Label ⌐912⌐ control, which is configured using the Appearance ⌐1000⌐>Text property to `Logo Bottom Left` and `Logo Bottom Right` respectively.

Each group box contains two TriggerButton ⌐960⌐ controls and a DropDownListToFields ⌐903⌐ control. Each TriggerButton ⌐960⌐ control references the Clarity system with the ID of 1 (defined using the ClarityID ⌐884⌐ property). The channel number that each TriggerButton ⌐960⌐ will control is channel 1. This is configured using the ChannelNumber ⌐883⌐ property.

The respective On buttons trigger the logo currently loaded to display if the logo is currently hidden. They are named internally as `triggerLogoBottomLeftOn` and `triggerLogoBottomRightOn` using the Design> ⌐1003⌐Name property. Their respective screen names (`On`) are defined using the Appearance ⌐1000⌐>Text property. The respective trigger key that will action the referenced logo to display is set to 3 (`triggerLogoBottomLeftOn`) and 4 (`triggerLogoBottomRightOn`) using the TriggerLetter ⌐962⌐ property.

The respective Off buttons trigger the logo currently loaded to hide if the logo is currently displayed. They are named internally as `triggerLogoBottomLeftOff` and `triggerLogoBottomRightOff` using the Design> ⌐1003⌐Name property. Their respective screen names (`Off`) are defined using the Appearance ⌐1000⌐>Text property. The respective trigger key that will action the referenced logo to hide is set to E (`triggerLogoBottomLeftOff`) and R (`triggerLogoBottomRightOff`) using the TriggerLetter ⌐962⌐ property.

The respective drop-down list boxes (DropDownListToFields ⌐903⌐) enable the selection of a different logo to display. They are named internally as `dropDownListToFields3` and `dropDownListToFields4` using the Design> ⌐1003⌐ Name property. The page number (1) and field number (3 or 4) that each drop-down list box will update is defined using the PageNumber ⌐896⌐ and FieldNumber ⌐902⌐ properties respectively. Both the list items and the paths to new logos are defined using the XML file that is referenced by the XmlDataFile ⌐905⌐ property. The `dropDownListToFields3` control references the `BasicControlField3.xml` file in the `BasicControl\XML Files` folder; the `dropDownListToFields4` control references the `BasicControlField4.xml` file. These XML files were created using the XML Table Creator ⌐858⌐.

Each XML file contains data sets (columns of data). Each column is named using the `ColumnName` column. The page number (1) and field number (3 or 4 depending on which file is opened) that is to be updated with new data is defined in the `PageNumber` and `FieldNumber` columns respectively for the `LogoGraphic` data set.
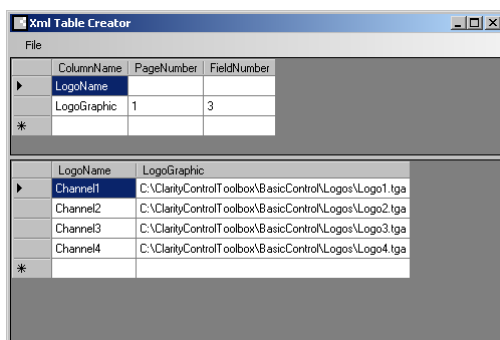
The `LogoName` data set is the list of names shown by the respective DropDownListToFields ⌐903⌐ control. This data is configured to be shown in each list using the Data> ⌐1003⌐DisplayMember. The `LogoGraphic` data set is the list of file paths that reference alternative logos stored in the `BasicControl\Logos` folder. When a name (`LogoName`) is selected from a drop-down list, the logo referenced in the adjacent position in the `LogoGraphic` data set replaces that currently being displayed.

Top Ticker and Bottom Ticker

Two GroupBox ⌐911⌐ controls have been inserted. Each GroupBox ⌐911⌐ control contains a Label ⌐912⌐ control, which is configured using the Appearance ⌐1000⌐>Text property to `Top Ticker` and `Bottom Ticker` respectively.

Each group box contains two TriggerButton ⌐960⌐ controls and a TextBoxToField ⌐923⌐ control. Each TriggerButton ⌐960⌐ control references the Clarity system with the ID of 1 (defined using the ClarityID ⌐884⌐ property). The channel number that each TriggerButton ⌐960⌐ will control is channel 1. This is configured using the ChannelNumber ⌐883⌐ property.

The respective On buttons trigger the continuous ticker to display if the ticker is currently hidden. They are named internally as `triggerTopTickerOn` and `triggerBottomTickerOn` using the Design> ⌐1003⌐Name property. Their

respective screen names (On) are defined using the Appearance [1000]>Text property. The respective trigger key that will action the continuous ticker to display is set to Q (triggerTopTickerOn) and W (triggerBottomTickerOn) using the TriggerLetter [962] property.

The respective Off buttons trigger the continuous ticker to hide if the ticker is currently displayed. They are named internally as triggerTopTickerOff and triggerBottomTickerOff using the Design> [1003]Name property. Their respective screen names (Off) are defined using the Appearance [1000]>Text property. The respective trigger key that will action the continuous ticker to hide is set to 1 (triggerTopTickerOff) and 2 (triggerBottomTickerOff) using the TriggerLetter [962] property.

The respective text boxes (TextBoxToField [923]) enable entry of new ticker text to replace text that appears by default in each text page. They are named internally as textBoxToField7 and textBoxToField8 using the Design> [1003] Name property. The page number (1) and field number (7 or 8) that each text box will update is defined using the PageNumber [896] and FieldNumber [902] properties respectively. When new text is entered into the respective text boxes, the text shown by the respective continuous ticker is updated in real-time without having to use the On and Off buttons.

11.1.10.2.3   Related job description

The following section details the various parts of the CG Tools job (BasicControl.ppj). Page graphic elements are listed below in the foreground layer order for the page (as shown by the Layer Tree control box) [341].
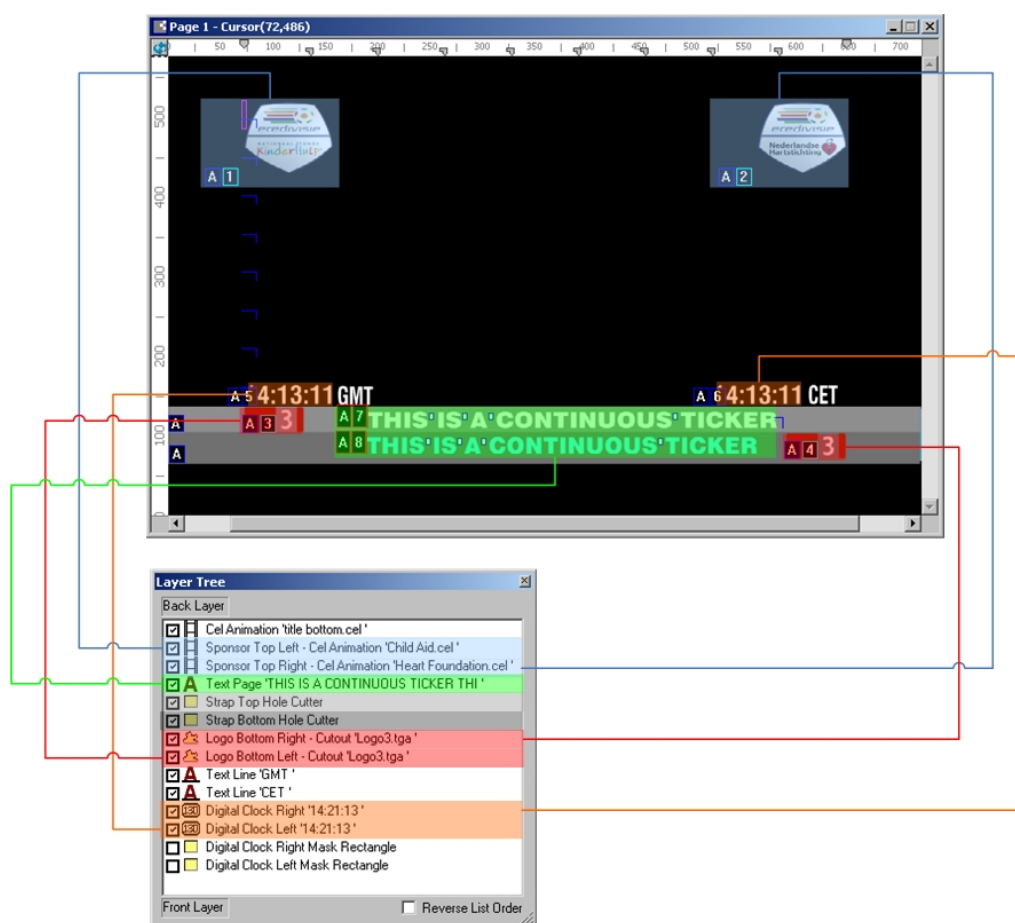
Cel Animation 'title bottom.cel'

Not shown in the illustration above. This is a full width strap cel animation that is positioned in the lower third, behind the Strap Top Hole Cutter and Strap Bottom Hole Cutter. It is configured to appear when the page is taken and stays on screen all of the time.

Sponsor Top Left - Cel Animation 'Child Aid.cel'

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   876

Copyright © 2000-2006 Pixel Power Ltd.

This is a cel animation that can be changed during playback using the Sponsor Top Left drop-down list box on the Basic Control application. It can be hidden or displayed using the respective Sponsor Top Left On and Off buttons. The cel animation is configured with an animation marker and is associated with a field marker. This animation marker is configured with a Fade effect and the 7 and U On/Off trigger keys. These trigger keys are used by the respective Sponsor Top Left On and Off buttons. The associated field marker enables the cel animation to be changed remotely. The field marker is configured as field 1 and receives new file path information from the Sponsor Top Left drop-down list box which uses the `BasicControlField1.xml` file to select a new cel animation.

Sponsor Top Right - Cel Animation 'Heart Foundation.cel'

This is a cel animation that can be changed during playback using the Sponsor Top Right drop-down list box on the Basic Control application. It can be hidden or displayed using the respective Sponsor Top Right On and Off buttons. The cel animation is configured with an animation marker and is associated with a field marker. This animation marker is configured with a Fade effect and the 8 and I On/Off trigger keys. These trigger keys are used by the respective Sponsor Top Right On and Off buttons. The associated field marker enables the cel animation to be changed remotely. The field marker is configured as field 2 and receives new file path information from the Sponsor Top Right drop-down list box which uses the `BasicControlField2.xml` file to select a new cel animation.

Text Page 'THIS IS A CONTINUOUS TICKER THI'

This is single text page. Carriage returns were entered and the cursor positioned using the Left CTRL + Left ALT key combination.

For the first continuous ticker in the text page, an animation marker was first inserted and configured with a continuous ticker animation effect. This animation marker is configured with a mask and is configured to appear when the Take key is pressed. The mask enables ticker text to end before the logo (Logo Bottom Left) positioned to the left of the text.

A field marker was then inserted next to animation marker. The field marker is configured as field 7, is [configured with the field data] [283] `THIS IS A CONTINUOUS TICKER` and receives new text from the Top Ticker text box on the Basic Control application.

For the second continuous ticker in the text page, a carriage return is entered. An animation marker was then inserted and configured with a continuous ticker animation effect. This animation marker is configured with a mask and is configured to appear when the Take key is pressed. The mask enables ticker text to start after the logo (Logo Bottom Right) positioned to the right of the text. A field marker was then inserted next to animation marker. The field marker is configured as field 8, is [configured with the field data] [283] `THIS IS A CONTINUOUS TICKER` and receives new text from the Bottom Ticker text box on the Basic Control application.

Strap Top Hole Cutter and Strap Bottom Hole Cutter

These are both rectangle shapes that have been configured to [cut a hole in the background] [295]. Both rectangles are configured with an animation marker. The animation marker for the Strap Top Hole Cutter rectangle is configured with a Fade effect and the 1 and Q On/Off trigger keys. These trigger keys are used by the respective Top Ticker Off and On buttons. The animation marker for the Strap Bottom Hole Cutter rectangle is again configured with a Fade effect but with the 2 and W On/Off trigger keys. These trigger keys are used by the respective Bottom Ticker Off and On buttons.

Logo Bottom Right - Cutout 'Logo3.tga'

This is a cutout that can be changed during playback using the Logo Bottom Right drop-down list box on the Basic Control application. It can be hidden or displayed using the respective Logo Bottom Right On and Off buttons. The cutout is configured with an animation marker and is associated with a field marker. This animation marker is configured with a Fade effect and the 4 and R On/Off trigger keys. These trigger keys are used by the respective Logo Bottom Right On and Off buttons. The associated field marker enables the cutout to be changed remotely. The field marker is configured as field 4 and receives new file path information from the Logo Bottom Right drop-down list box which uses the `BasicControlField4.xml` file to select a new cutout.

Logo Bottom Left - Cutout 'Logo3.tga'

This is a cutout that can be changed during playback using the Logo Bottom Left drop-down list box on the Basic Control application. It can be hidden or displayed using the respective Logo Bottom Left On and Off buttons. The cutout is configured with an animation marker and is associated with a field marker. This animation marker is configured with a Fade effect and the 3 and E On/Off trigger keys. These trigger keys are used by the respective Logo

Bottom Left On and Off buttons. The associated field marker enables the cutout to be changed remotely. The field marker is configured as field 3 and receives new file path information from the Logo Bottom Left drop-down list box which uses the `BasicControlField3.xml` file to select a new cutout.

Text Line 'GMT ' and Text Line 'CET'

These are static text lines. They feature no animation and are not updated remotely. They are hidden/displayed by the relevant clock mask rectangle.

Digital Clock Right

This is a digital clock that can be hidden or displayed. The digital clock is associated with a field marker. The digital clock is hidden/displayed using the Digital Clock Right Mask Rectangle.

Digital Clock Left

This is a digital clock that can be hidden or displayed. The digital clock is associated with a field marker. The digital clock is hidden/displayed using the Digital Clock Left Mask Rectangle.

Digital Clock Right Mask Rectangle

Not shown in the illustration. Hides or displays the Digital Clock Right and Text Line 'CET ' elements. The rectangle is hidden from view using the Layer Tree control box 341. The rectangle has been configured to cut a hole in the background 295. The purple foreground colour is used for display purposes. When online, the rectangle fades the clock and text line through black. The rectangle is configured with an animation marker. This animation marker is configured with a Fade effect and the 6 and Y On/Off trigger keys. These trigger keys are used by the respective Digital Clock Right On and Off buttons. The definition of the trigger keys is reversed on the Digital Clock Right On and Off buttons (Y and 6), due to the fact that displaying the rectangle actually hides the clock and text line.

Digital Clock Left Mask Rectangle

Not shown in the illustration. Hides or displays the Digital Clock Left and Text Line 'GMT ' elements. The rectangle is hidden from view using the Layer Tree control box 341. The rectangle has been configured to cut a hole in the background 295. The purple foreground colour is used for display purposes. When online, the rectangle fades the clock and text line through black. The rectangle is configured with an animation marker. This animation marker is configured with a Fade effect and the 5 and T On/Off trigger keys. These trigger keys are used by the respective Digital Clock Left On and Off buttons. The definition of the trigger keys is reversed on the Digital Clock Left On and Off buttons (T and 5), due to the fact that displaying the rectangle actually hides the clock and text line.

11.1.10.3   Quiz application (QuizNation)

A simple application, created to control and update a Clarity quiz job that runs live, enabling viewers to participate by calling in to answer questions posed. Revenue is generated for the station hosting the quiz though telephone call charges.
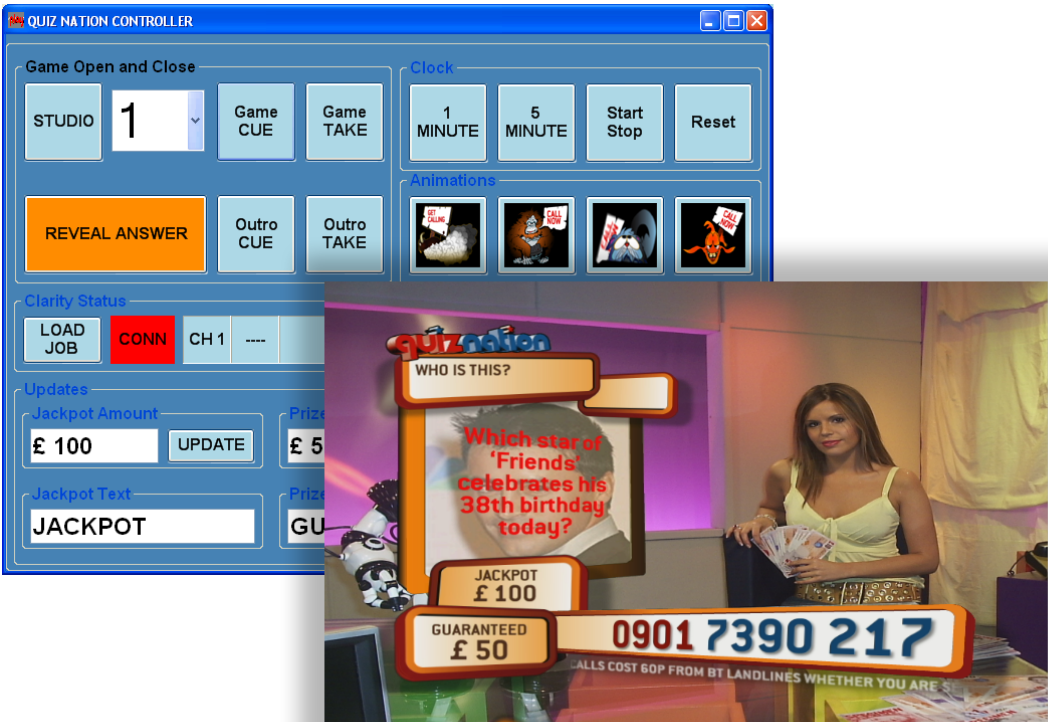
SEE ALSO

Folder structure 880

11.1.10.3.1   Folder structure

The following table documents the folder structure of the Quiz Application example:

Folder or file			Description
QuizNation	Cell		Cel animation files for the `Quiz.ppj` CG Tools job.
	Images		Images for the `Quiz.ppj` CG Tools job.
	Job Fonts		Hidden folder containing jobs fonts for the `Quiz.ppj` CG Tools job.
	Quiz		Hidden folder.
		Custom Animations	Custom animation files for the `Quiz.ppj` CG Tools job.
	Bull		Application images used by related TriggerButton [960] controls.
	Cat		
	Fish		
	Gorilla		
	Logo.bmp		Image.
	Logo.icon		Icon for the `Quiz Nation Control.exe` application
	Quiz Nation Control.config		Configuration file for the `Quiz Nation Control.xml` application.
	Quiz Nation Control.exe		Built application that will control the `Quiz.ppj` CG Tools job.
	Quiz Nation Control.xml		XML data file used to define the `Quiz Nation Control` application form.
	Quiz Nation Data.xml		XML data set used by the Game selection drop-down list box (dropDownListToFields1)
	Quiz.ppj		CG Tools job that the `Quiz Nation Control.exe` application will control.

11.1.11 Control reference (also listing supported _Clarity properties for each control)

The following controls are available for insertion into the current form in the Design area 855. Applicable properties for each control are listed in each sub-section. Controls are made available to the user using the Control list 855 and they are split into two groups (General controls 855 and Clarity controls 855). Beneath each section describing a control are sub-sections documenting the relevant _Clarity properties for that control. Properties are also referenced alphabetically in the _Clarity 963 section of Properties reference 963.

Name	Description	General 855	Clarity 855
AirStatus 882	Displays the on-air status of a channel on the connected Clarity 886 system.		■
Clarity 886	Defines a Clarity system that the application will communicate with.		■
ClarityConnectionStatus 891	Displays the connection status of the Clarity system referenced by a Clarity 886 control.		■
CuePageButton 894	Enables pages to be cued on a channel on the connected Clarity 886 system.		■
CueTakePageButton 897	Enable pages to be cued and taken on a channel on the connected Clarity 886 system.		■
DropDownListToField 900	Enables the selection of a data string to fill a designated page template field.		■
DropDownListToFields 903	Enables the selection of a data string supplied from a referenced XML data file to fill a designated page template field.		■
DropDownListToGlobalField 906	Enables the selection of a data string to fill a designated global field.		■
DropDownListToGlobalFields 908	Enables the selection of a data string supplied from a referenced XML data file to fill a designated global field.		■
GroupBox 911	Enables labelling of items on the current form in the Design area 855.	■	
Label 912	Enables labelling of items on the current form in the Design area 855.	■	
LoadJobButton 913	Enables a defined job to be loaded on the connected Clarity 886 system.		■
Logging 915	Enables logging for a defined Clarity 886 control. Logging can be stored via file or email.		■
Panel 919	Enables the creation of rectangular panels that can be used to visually group associated controls.	■	
Pointer 919	Implicitly required at design time by .NET based applications. Enables the software to operate correctly when no controls are selected in the Design area 855. Has no bearing on any aspect of functionality for applications built using the Clarity Control Toolbox software.	■	
TabControl 920	Enables the creation of tabbed selection window(s) that can contain control grouped controls.	■	
TakeButton 921	Enables a Take command to be actioned on the current channel on the connected Clarity 886 system.		■
TextBoxToField 923	Enables a numbered field on a selected page on the current channel on the connected Clarity 886 system to be filled by user defined text. The designated field can be updated using an instance of the TriggerButton 960.		■
TextBoxToGlobalField 926	Enables a global field on the current channel on the connected Clarity 886 system to be filled by user defined text.		■

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Name	Description	General 855	Clarity 855
Ticker 929	Inserts a Ticker control on the current form in the Design area 855.		■
TickerController 951	Enables a Ticker 929 control to be controlled on the current channel on the connected Clarity 886 system.		■
TriggerButton 960	Enables animations to be triggered on the current channel on the connected Clarity 886 system.		■

11.1.11.1   AirStatus

Available **Clarity** 963 **Properties**

BusyColor 883	ChannelNumber 883	ClarityID 884	Display 884
ErrorHandling 885	ReadyColor 885	StoppedColor 886	

Default naming convention (Design> 1005 **Name)**

`airStatusn`

Visual reference (Default) at design time

Ch1
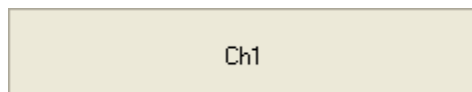
Remarks

Monitors and displays the on-air status of a channel on the connected Clarity 886 system.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID 884) and channel number to monitor (ChannelNumber 883).

Appearance

Configure the desired colours for the channel ready state (ReadyColor 885), when the channel is busy (BusyColor 883) and when the channel is stopped (StoppedColor 886).

The information shown by the control can be configured using the Display 884 property e.g. you may want to change the default `Ch` to `ChPage` (to show the channel number AND page number).

Configure other generic appearance settings as desired using the Appearance 1000 properties.

Error handling

Error reporting relating to channel status/readiness can be configured using the ErrorHandling 885 property. Logging for a Clarity control is achieved using the Logging 915 control and therefore must be present in the current project.

Usage

When running a built application, there are no usage guidelines for this control.

SEE ALSO

ClarityConnectionStatus 891

11.1.11.1.1   BusyColor

Controls hosting this property

AirStatus [882]			

Type

```
Colour
```

Default Value

`Orange`

Remarks

Gets or sets the busy status colour for the on-air channel on the connected Clarity [886] system.

Related properties

Clarity> [963] ReadyColor [885]
Clarity> [963] StoppedColor [886]

11.1.11.1.2   ChannelNumber

Controls hosting this property

AirStatus [882]	CuePageButton [894]	CueTakePageButton [897]	TakeButton [921]
TickerController [951]	TriggerButton [960]		

Type

```
Integer
```

Values

Value	Description
n	Channel number to be monitored, controlled or triggered.
1	Channel 1.
2	Channel 2.
3	Channel 1's auxiliary channel.
4	Channel 2's auxiliary channel.
5	User interface (software based) channel.

Default Value

`0`

Remarks

Gets or sets the active channel number on the connected Clarity [886] system.

Related properties

Clarity> [963] Clarity ID [884]

11.1.11.1.3   ClarityID

Controls hosting this property

[AirStatus](#) 882	[Clarity](#) 886	[ClarityConnectionStatus](#) 891	[CuePageButton](#) 894
[CueTakePageButton](#) 897	[DropDownListToField](#) 900	[DropDownListToFields](#) 903	[DropDownListToGlobalField](#) 906
[DropDownListToGlobalFields](#) 908	[LoadJobButton](#) 913	[TakeButton](#) 921	[TextBoxToField](#) 923
[TextBoxToGlobalField](#) 926	[Ticker](#) 929	[TickerController](#) 951	[TriggerButton](#) 960

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available [Clarity](#) 886 control present in the current project.

Related properties

[Clarity>](#) 963 [ChannelNumber](#) 883
[Clarity>](#) 963 [ErrorHandling](#) 885

11.1.11.1.4   Display

Controls hosting this property

[AirStatus](#) 882			

Type

```
String
```

Values

Value	Description	
`<display syntax>`	Information type.	
	Ch	Channel number.
	ChPage	Channel number and page number.
	ChPageName	Channel number, page number and page name.

Default Value

Ch

Remarks

Gets or sets the character(s) that will prefix the channel number being monitored on the connected [Clarity](#) 886 system

Related properties

Clarity> |963| BusyColor |883|
Clarity> |963| ReadyColor |885|
Clarity> |963| StoppedColor |886|

11.1.11.1.5   ErrorHandling

Controls hosting this property

AirStatus |882|	Clarity |886|	ClarityConnectionStatus |891|	CuePageButton |894|
CueTakePageButton |897|	DropDownListToField |900|	DropDownListToFields |903|	DropDownListToGlobalField |906|
DropDownListToGlobalFields |908|	LoadJobButton |913|	TakeButton |921|	TextBoxToField |923|
TextBoxToGlobalField |926|	Ticker |929|	TickerController |951|	TriggerButton |960|

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging |915| control.
	Log	Error reported in email log via Logging |915| control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging |915| control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> |963| EmailLogFrom |916|
Clarity> |963| EmailLogSubject |916|
Clarity> |963| EmailLogTo |917|
Clarity> |963| EmailSMTPServer |917|

11.1.11.1.6   ReadyColor

Controls hosting this property

AirStatus |882|			

Type

```
Colour
```

Default Value

Green

Remarks

885   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Gets or sets the ready status colour for the on-air channel on the connected <u>Clarity</u> [886] system.

Related properties

<u>Clarity></u> [963] <u>BusyColor</u> [883]
<u>Clarity></u> [963] <u>StoppedColor</u> [886]

11.1.11.1.7   StoppedColor

Controls hosting this property

<u>AirStatus</u> [882]			

Type

`Colour`

Default Value

Red

Remarks

Gets or sets the stopped colour for the on-air channel on the connected <u>Clarity</u> [886] system.

Related properties

<u>Clarity></u> [963] <u>BusyColor</u> [883]
<u>Clarity></u> [963] <u>ReadyColor</u> [885]

11.1.11.2   Clarity

Available <u>Clarity</u> [963] Properties

<u>AutoReconnect</u> [887]	<u>AutoReconnectInterval</u> [887]	<u>ClarityID</u> [884]	<u>ErrorHandling</u> [885]
<u>FeedbackPortNumber</u> [889]	<u>HostName</u> [890]	<u>PortNumber</u> [890]	

Default naming convention (<u>Design></u> [1003] Name)

`clairtyn`

Visual reference (Default) at design time

Remarks

Defines a Clarity system that the application will communicate with. Inserted Clarity controls are listed in the <u>component window</u> [854]. Logging for a Clarity control is achieved using the <u>Logging</u> [915] control.

Implementation

An inherent part of any application created using the Clarity Control Toolbox software. The Clarity control enables communication between the hosting application and the defined Clarity system unit. Multiple Clarity controls are permitted within the same project, enabling multiple systems to be controlled from the same application.

In order for controls to perform required functions on the defined Clarity system, an ID has to be given to the Clarity control, thus making it unique and enabling other controls in the same project to identity a specific instance of the control. This is achieved using the ClarityID [884] property.

The hostname name of the system to be controlled is configured using the HostName [890] property. When the built application is started, a connection is initiated with a copy of the Clarity XML Socket Server [1010] on the connected Clarity system over the ports defined using the PortNumber [890] and FeedbackPortNumber [889] properties.

If connection is lost during an operation session, re-connection ability is configured using the AutoReconnect [887] and AutoReconnectInterval [887] properties.

Appearance

N/A

Error handling

Error reporting relating to the defined Clarity system can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.2.1 AutoReconnect

Controls hosting this property

Clarity [886]			

Type

```
Boolean
```

Values

Value	Description
True	Automatically reconnect.
False	Do not reconnect automatically.

Default Value

```
False
```

Remarks

If the Clarity XML Socket Server [1010] on the connected Clarity system loses connection with an application built using the Clarity Control Toolbox, this property enables reconnection.

Related properties

Clarity> [963] AutoReconnectInterval [887]

11.1.11.2.2 AutoReconnectInterval

Controls hosting this property

Clarity [886]			

Type

```
Integer
```

Values

Value	Description
nnnnnnnn	Connection interval in milliseconds.

Default Value

5000

Remarks

If the Clarity XML Socket Server [1010] on the connected Clarity system loses connection with an application built using the Clarity Control Toolbox, this property defines the time elapsed until automatic reconnection is initiated with the Clarity XML Socket Server.

Related properties

Clarity> [963] AutoReconnect [887]

11.1.11.2.3   ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

Clarity> [963] ChannelNumber [883]
Clarity> [963] ErrorHandling [885]

11.1.11.2.4   ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging [915] control.
	Log	Error reported in email log via Logging [915] control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> [963] EmailLogFrom [916]
Clarity> [963] EmailLogSubject [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.11.2.5   FeedbackPortNumber

Controls hosting this property

| Clarity [886] | | | |

Type

```
Integer
```

Values

Value	Description
nnnnn	Port number.

Default Value

```
10221
```

Remarks

Gets or sets the feedback port number on the connected Clarity [886] system. This port is used to monitor/receive feedback commands via a copy of the Clarity XML Socket Server [1010] on the connected Clarity system.

Related properties

889   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Clarity> |963| Clarity ID |884|

11.1.11.2.6 HostName

Controls hosting this property

Clarity |886|			

Type

String

Values

Value	Description
<hostname>	DNS hostname (e.g. localhost).

Default Value

N/A

Remarks

Gets or sets the DNS hostname of the Clarty system that the built application will connect to.

Related properties

None

11.1.11.2.7 PortNumber

Controls hosting this property

Clarity |886|			

Type

Integer

Values

Value	Description
nnnnn	Port number.

Default Value

10220

Remarks

Gets or sets the port number on the connected Clarity |886| system. This port is used to transmit commands to a copy of the Clarity XML Socket Server |1010| on the connected Clarity system.

Related properties

Clarity> |963| Clarity ID |884|
Clarity> |963| FeedbackPortNumber |889|

11.1.11.3   ClarityConnectionStatus

Available <u>Clarity</u> ⌐963¬ **Properties**

<u>ClarityID</u> ⌐884¬	<u>ConnectedColor</u> ⌐892¬	<u>DisconnectedColor</u> ⌐892¬	<u>ErrorHandling</u> ⌐885¬

Default naming convention (<u>Design></u> ⌐1003¬ **Name)**

```
clarityConnectionStatusn
```

Visual reference (Default) at design time

clarityConnectionSt

Remarks

Displays the connection status of the Clarity system referenced by the a <u>Clarity</u> ⌐886¬ control.

Implementation

A vital requirement when connecting to a Clarity system referenced by an instance of the <u>Clarity</u> ⌐886¬ control. For every instance, an instance of the ClarityConnectionStatus control should be inserted.

Connection and data

Configure the control by defining the Clarity system (<u>ClarityID</u> ⌐884¬) to monitor.

Appearance

Configure the desired colours for the system connected state (<u>ConnectedColor</u> ⌐892¬) and disconnected state (<u>DisconnectedColor</u> ⌐892¬). Configure other generic appearance settings as desired using the <u>Appearance</u> ⌐1000¬ properties.

Error handling

Error reporting relating to the defined Clarity system can be configured using the <u>ErrorHandling</u> ⌐885¬ property. Logging for a Clarity control is achieved using the <u>Logging</u> ⌐915¬ control and therefore must be present in the current project.

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.3.1   ClarityID

Controls hosting this property

<u>AirStatus</u> ⌐882¬	<u>Clarity</u> ⌐886¬	<u>ClarityConnectionStatus</u> ⌐891¬	<u>CuePageButton</u> ⌐894¬
<u>CueTakePageButton</u> ⌐897¬	<u>DropDownListToField</u> ⌐900¬	<u>DropDownListToFields</u> ⌐903¬	<u>DropDownListToGlobalField</u> ⌐906¬
<u>DropDownListToGlobalFields</u> ⌐908¬	<u>LoadJobButton</u> ⌐913¬	<u>TakeButton</u> ⌐921¬	<u>TextBoxToField</u> ⌐923¬
<u>TextBoxToGlobalField</u> ⌐926¬	<u>Ticker</u> ⌐929¬	<u>TickerController</u> ⌐951¬	<u>TriggerButton</u> ⌐960¬

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886 control present in the current project.

Related properties

Clarity> 963ChannelNumber 883
Clarity> 963ErrorHandling 885

11.1.11.3.2 ConnectedColor

Controls hosting this property

ClarityConnectionStatus 891			

Type

```
Colour
```

Default Value

Green

Remarks

Gets or sets the connected status colour for the on-air channel on the connected Clarity 886 system.

Related properties

Clarity> 963DisconnectedColor 892
Clarity> 963ReadyColor 885
Clarity> 963StoppedColor 886

11.1.11.3.3 DisconnectedColor

Controls hosting this property

ClarityConnectionStatus 891			

Type

```
Colour
```

Default Value

Red

Remarks

Gets or sets the disconnected status colour for the on-air channel on the connected Clarity 886 system.

Related properties

Clarity> 963ConnectedColor 892
Clarity> 963ReadyColor 885
Clarity> 963StoppedColor 886

11.1.11.3.4   ErrorHandling

Controls hosting this property

[AirStatus](#) 882	[Clarity](#) 886	[ClarityConnectionStatus](#) 891	[CuePageButton](#) 894
[CueTakePageButton](#) 897	[DropDownListToField](#) 900	[DropDownListToFields](#) 903	[DropDownListToGlobalField](#) 906
[DropDownListToGlobalFields](#) 908	[LoadJobButton](#) 913	[TakeButton](#) 921	[TextBoxToField](#) 923
[TextBoxToGlobalField](#) 926	[Ticker](#) 929	[TickerController](#) 951	[TriggerButton](#) 960

Type

`String`

Values

Value	Description	
`String`	Error handling type for selected control.	
	`None`	No error handling.
	`MsgBox`	Error shown as message box via [Logging](#) 915 control.
	`Log`	Error reported in email log via [Logging](#) 915 control.
	`MsgBoxLog`	Error shown as message box AND reported in email log via [Logging](#) 915 control.

Default Value

`None`

Remarks

Configures the how errors are handled for the selected control.

Related properties

[Clarity>](#) 963 [EmailLogFrom](#) 916
[Clarity>](#) 963 [EmailLogSubject](#) 916
[Clarity>](#) 963 [EmailLogTo](#) 917
[Clarity>](#) 963 [EmailSMTPServer](#) 917

11.1.11.4   CuePageButton

Available   Clarity |963| **Properties**

ChannelNumber |883|	ClarityID |884|	ErrorHandling |885|	PageNumber |896|

Default naming convention (Design> |1003|**Name)**

```
cuePageButtonn
```

Visual reference (Default) at design time

Remarks

Enables pages to be cued on a channel on the connected Clarity |886| system.

Implementation

Should be used in conjunction with the LoadJobButton |913| control to load a job prior to cueing a page and the ClarityConnectionStatus |891| and/or AirStatus |882| controls to monitor the status of the connected Clarity system unit and its available channels.

Connection and data
Configure the control by defining the Clarity system (ClarityID |884|) and channel number to cue (ChannelNumber |883|). You can then configure the page number to cue (PageNumber |896|). This page number is fixed and cannot be updated dynamically. The page number defined is usually a dynamic template page.

Appearance
Configure other generic appearance settings as desired using the Appearance |1000| properties.

Error handling
Error reporting relating to channel status/readiness can be configured using the ErrorHandling |885| property. Logging for a Clarity control is achieved using the Logging |915| control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the CuePageButton control to put the designated channel online and cue the designated page.

11.1.11.4.1   ChannelNumber

Controls hosting this property

AirStatus |882|	CuePageButton |894|	CueTakePageButton |897|	TakeButton |921|
TickerController |951|	TriggerButton |960|		

Type

```
Integer
```

Values

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   894

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
n	Channel number to be monitored, controlled or triggered.
1	Channel 1.
2	Channel 2.
3	Channel 1's auxiliary channel.
4	Channel 2's auxiliary channel.
5	User interface (software based) channel.

Default Value

0

Remarks

Gets or sets the active channel number on the connected Clarity [886] system.

Related properties

 Clarity> [963] Clarity ID [884]

11.1.11.4.2   ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

 Clarity> [963] ChannelNumber [883]
 Clarity> [963] ErrorHandling [885]

11.1.11.4.3   ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging [915] control.
	Log	Error reported in email log via Logging [915] control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> [963] EmailLogFrom [916]
Clarity> [963] EmailLogSubject [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.11.4.4   PageNumber

Controls hosting this property

CuePageButton [894]	CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]
TextBoxToField [923]	Ticker [929]		

Type

```
Integer
```

Values

Value	Description
nnnn	Page number.

Default Value

```
0
```

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity [886] system.

Related properties

None

11.1.11.5   CueTakePageButton

Available Clarity [963] Properties

ChannelNumber [883]	ClarityID [884]	ErrorHandling [885]	PageNumber [896]

Default naming convention (Design> [1005] Name)

```
cueTakePageButtonn
```

Visual reference (Default) at design time

cueTakePa
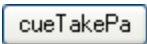
Remarks

Enable pages to be cued and taken on a channel on the connected Clarity [886] system.

Implementation

Should be used in conjunction with the LoadJobButton [913] control to load a job prior to cueing AND taking a page and the ClarityConnectionStatus [891] and/or AirStatus [882] controls to monitor the status on the connected Clarity system unit and its available channels.

Connection and data

Configure the control by defining the Clarity system (ClarityID [884]) and channel number to cue (ChannelNumber [883]). You can then configure the page number to cue and the take (PageNumber [896]). This page number is fixed and cannot be updated dynamically. The page number defined is usually a dynamic template page.

Appearance

Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling

Error reporting relating to channel status/readiness can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the CuePageButton control to put the designated channel online and then cue AND take the designated page.

11.1.11.5.1   ChannelNumber

Controls hosting this property

AirStatus [882]	CuePageButton [894]	CueTakePageButton [897]	TakeButton [921]
TickerController [951]	TriggerButton [960]		

Type

```
Integer
```

Values

Value	Description
n	Channel number to be monitored, controlled or triggered.
1	Channel 1.
2	Channel 2.
3	Channel 1's auxiliary channel.
4	Channel 2's auxiliary channel.
5	User interface (software based) channel.

Default Value

0

Remarks

Gets or sets the active channel number on the connected Clarity ⌐886⌐ system.

Related properties

  Clarity> ⌐963⌐Clarity ID ⌐884⌐

11.1.11.5.2   ClarityID

Controls hosting this property

AirStatus ⌐882⌐	Clarity ⌐886⌐	ClarityConnectionStatus ⌐891⌐	CuePageButton ⌐894⌐
CueTakePageButton ⌐897⌐	DropDownListToField ⌐900⌐	DropDownListToFields ⌐903⌐	DropDownListToGlobalField ⌐906⌐
DropDownListToGlobalFields ⌐906⌐	LoadJobButton ⌐913⌐	TakeButton ⌐921⌐	TextBoxToField ⌐923⌐
TextBoxToGlobalField ⌐926⌐	Ticker ⌐929⌐	TickerController ⌐951⌐	TriggerButton ⌐960⌐

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity ⌐886⌐ control present in the current project.

Related properties

  Clarity> ⌐963⌐ChannelNumber ⌐883⌐
  Clarity> ⌐963⌐ErrorHandling ⌐885⌐

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   898

Copyright © 2000-2006 Pixel Power Ltd.

11.1.11.5.3   ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description	
`String`	Error handling type for selected control.	
	`None`	No error handling.
	`MsgBox`	Error shown as message box via Logging [915] control.
	`Log`	Error reported in email log via Logging [915] control.
	`MsgBoxLog`	Error shown as message box AND reported in email log via Logging [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> [963] EmailLogFrom [916]
Clarity> [963] EmailLogSubject [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.11.5.4   PageNumber

Controls hosting this property

CuePageButton [894]	CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]
TextBoxToField [923]	Ticker [929]		

Type

```
Integer
```

Values

Value	Description
`nnnn`	Page number.

Default Value

```
0
```

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity ⌐886⌐ system.

Related properties

None

11.1.11.6   DropDownListToField

Available   Clarity ⌐963⌐ Properties

ClarityID ⌐884⌐	ErrorHandling ⌐885⌐	FieldNumber ⌐902⌐	PageNumber ⌐896⌐

Default naming convention (Design> ⌐1003⌐ Name)

`dropDownListToFieldn`

Visual reference (Default) at design time

Remarks

Enables the selection of a data string to fill a designated page template field on a selected page.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID ⌐884⌐). You can then configure the page template field number (FieldNumber ⌐902⌐) and the page number (PageNumber ⌐896⌐). This page number is fixed and cannot be updated dynamically. The page number defined is usually a dynamic template page.

Data strings can be entered using the String Collection Editor dialog box ⌐868⌐. This can be displayed using the Data> ⌐1003⌐ Items property.

Appearance

Configure other generic appearance settings as desired using the Appearance ⌐1000⌐ properties.

Error handling

Error reporting can be configured using the ErrorHandling ⌐885⌐ property. Logging for a Clarity control is achieved using the Logging ⌐915⌐ control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the DropDownListToField control to drop-down a list of available data strings, the select a string from the list to fill the designated page template field on the designated page.

11.1.11.6.1   ClarityID

Controls hosting this property

AirStatus ⌐882⌐	Clarity ⌐886⌐	ClarityConnectionStatus ⌐891⌐	CuePageButton ⌐894⌐
CueTakePageButton ⌐897⌐	DropDownListToField ⌐900⌐	DropDownListToFields ⌐903⌐	DropDownListToGlobalField ⌐906⌐
DropDownListToGlobalFields ⌐908⌐	LoadJobButton ⌐913⌐	TakeButton ⌐921⌐	TextBoxToField ⌐923⌐

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886 control present in the current project.

Related properties

Clarity> 963 ChannelNumber 883
Clarity> 963 ErrorHandling 885

11.1.11.6.2   ErrorHandling

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

String

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging 915 control.
	Log	Error reported in email log via Logging 915 control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging 915 control.

Default Value

None

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> 963 EmailLogFrom 916
Clarity> 963 EmailLogSubject 916
Clarity> 963 EmailLogTo 917
Clarity> 963 EmailSMTPServer 917

11.1.11.6.3 FieldNumber

Controls hosting this property

DropDownListToField 900	DropDownListToFields 903	TextBoxToField 923	

Type

Integer

Values

Value	Description
nnnn	Page template field number.

Default Value

0

Remarks

Gets or sets the page template field number to update on the page specified using the _Clarity>_ 963 PageNumber 896 property.

Related properties

Clarity> 963 PageNumber 896

11.1.11.6.4 PageNumber

Controls hosting this property

CuePageButton 894	CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903
TextBoxToField 923	Ticker 929		

Type

Integer

Values

Value	Description
nnnn	Page number.

Default Value

0

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity 886 system.

Related properties

None

11.1.11.7 DropDownListToFields

Available Clarity [963] **Properties**

ClarityID [884]	ErrorHandling [885]	FieldNumber [902]	PageNumber [896]
XmlDataFile [905]			

Default naming convention (Design> [1005] **Name)**

```
dropDownListToFieldsn
```

Visual reference (Default) at design time

Remarks

Enables the selection of a data string supplied from a referenced XML data file to fill a designated page template field on a selected page.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID [884]). You can then configure the page template field number (FieldNumber [902]) and the page number (PageNumber [896]). This page number is fixed and cannot be updated dynamically. The page number defined is usually a dynamic template page.

Data strings are supplied via the defined XML data file (XmlDataFile [905]) created using the XML Table Creator [858].

Appearance

Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling

Error reporting can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the DropDownListToFields control to drop-down a list of available data strings, the select a string from the list to fill the designated page template field on the designated page.

11.1.11.7.1 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886 control present in the current project.

Related properties

 Clarity> 963 ChannelNumber 883
 Clarity> 963 ErrorHandling 885

11.1.11.7.2   ErrorHandling

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

String

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging 915 control.
	Log	Error reported in email log via Logging 915 control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging 915 control.

Default Value

None

Remarks

Configures the how errors are handled for the selected control.

Related properties

 Clarity> 963 EmailLogFrom 916
 Clarity> 963 EmailLogSubject 916
 Clarity> 963 EmailLogTo 917
 Clarity> 963 EmailSMTPServer 917

11.1.11.7.3 FieldNumber

Controls hosting this property

DropDownListToField [900]	DropDownListToFields [903]	TextBoxToField [923]

Type

`Integer`

Values

Value	Description
nnnn	Page template field number.

Default Value

`0`

Remarks

Gets or sets the page template field number to update on the page specified using the _Clarity>_ [963] PageNumber [896] property.

Related properties

Clarity> [963] PageNumber [896]

11.1.11.7.4 PageNumber

Controls hosting this property

CuePageButton [894]	CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]
TextBoxToField [923]	Ticker [929]		

Type

`Integer`

Values

Value	Description
nnnn	Page number.

Default Value

`0`

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity [886] system.

Related properties

None

11.1.11.7.5 XmlDataFile

Controls hosting this property

DropDownListToFields [903]	DropDownListToGlobalFields [908]

Type

```
String
```

Values

Value	Description
`<path>`	UNC or local path and XML filename.

Default Value

N/A

Remarks

Sets the source of XML data for the selected drop-down list box.

Related properties

None

SEE ALSO

XML Table Creator [858]
Tools> [863] XML Table Creator [864]

11.1.11.8   DropDownListToGlobalField

Available _Clarity_ [963] Properties

ClarityID [884]	ErrorHandling [885]	GlobalFieldNumber [908]	

Default naming convention (Design> [1003] Name)

```
dropDownListToGlobalFieldn
```

Visual reference (Default) at design time

Remarks

Enables the selection of a data string to fill a designated global field.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID [884]). You can then configure the global field number (GlobalFieldNumber [908]). Data strings can be entered using the String Collection Editor dialog box [868]. This can be displayed using the Data> [1003] Items property.

Appearance

Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling

Error reporting can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the DropDownListToGlobalField control to drop-

down a list of available data strings, the select a string from the list to fill the designated global field.

11.1.11.8.1 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

`String`

Values

Value	Description
`String`	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

Clarity> [963] ChannelNumber [883]
Clarity> [963] ErrorHandling [885]

11.1.11.8.2 ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

`String`

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging [915] control.
	Log	Error reported in email log via Logging [915] control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging [915] control.

Default Value

None

Remarks

Configures the how errors are handled for the selected control.

Related properties

_Clarity> [963] EmailLogFrom [916]
_Clarity> [963] EmailLogSubject [916]
_Clarity> [963] EmailLogTo [917]
_Clarity> [963] EmailSMTPServer [917]

11.1.11.8.3   GlobalFieldNumber

Controls hosting this property

DropDownListToGlobalField [906]	DropDownListToGlobalFields [908]	TextBoxToGlobalField [926]	

Type

Integer

Values

Value	Description
nnnn	Global field number.

Default Value

0

Remarks

Gets or sets the global field number to update.

Related properties

None

11.1.11.9   DropDownListToGlobalFields

Available _Clarity [963] Properties

ClarityID [884]	ErrorHandling [885]	GlobalFieldNumber [908]	XmlDataFile [905]

Default naming convention (Design> [1003] Name)

dropDownListToGlobalFieldsn

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   908

Copyright © 2000-2006 Pixel Power Ltd.

Visual reference (Default) at design time

Remarks

Enables the selection of a data string supplied from a referenced XML data file to fill a designated global field.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID 884). You can then configure the global field number (GlobalFieldNumber 908). Data strings are supplied via the defined XML data file (XmlDataFile 905) created using the XML Table Creator 858.

Appearance

Configure other generic appearance settings as desired using the Appearance 1000 properties.

Error handling

Error reporting can be configured using the ErrorHandling 885 property. Logging for a Clarity control is achieved using the Logging 915 control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the DropDownListToGlobalFields control to drop-down a list of available data strings, the select a string from the list to fill the designated global field.

11.1.11.9.1   ClarityID

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886 control present in the current project.

Related properties

Clarity> 963 ChannelNumber 883
Clarity> 963 ErrorHandling 885

11.1.11.9.2   ErrorHandling

Controls hosting this property

[AirStatus](#) [882]	[Clarity](#) [886]	[ClarityConnectionStatus](#) [891]	[CuePageButton](#) [894]
[CueTakePageButton](#) [897]	[DropDownListToField](#) [900]	[DropDownListToFields](#) [903]	[DropDownListToGlobalField](#) [906]
[DropDownListToGlobalFields](#) [908]	[LoadJobButton](#) [913]	[TakeButton](#) [921]	[TextBoxToField](#) [923]
[TextBoxToGlobalField](#) [926]	[Ticker](#) [929]	[TickerController](#) [951]	[TriggerButton](#) [960]

Type

```
String
```

Values

Value	Description	
`String`	Error handling type for selected control.	
	`None`	No error handling.
	`MsgBox`	Error shown as message box via [Logging](#) [915] control.
	`Log`	Error reported in email log via [Logging](#) [915] control.
	`MsgBoxLog`	Error shown as message box AND reported in email log via [Logging](#) [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

[_Clarity>](#) [963] [EmailLogFrom](#) [916]
[_Clarity>](#) [963] [EmailLogSubject](#) [916]
[_Clarity>](#) [963] [EmailLogTo](#) [917]
[_Clarity>](#) [963] [EmailSMTPServer](#) [917]

11.1.11.9.3   GlobalFieldNumber

Controls hosting this property

[DropDownListToGlobalField](#) [906]	[DropDownListToGlobalFields](#) [908]	[TextBoxToGlobalField](#) [926]	

Type

```
Integer
```

Values

Value	Description
`nnnn`	Global field number.

Default Value

```
0
```

Remarks

Gets or sets the global field number to update.

Related properties

None

11.1.11.9.4   XmlDataFile

Controls hosting this property

[DropDownListToFields](#) ⁹⁰³	[DropDownListToGlobalFields](#) ⁹⁰⁸		

Type

```
String
```

Values

Value	Description
<path>	UNC or local path and XML filename.

Default Value

N/A

Remarks

Sets the source of XML data for the selected drop-down list box.

Related properties

None

SEE ALSO

[XML Table Creator](#) ⁸⁵⁸
[Tools>](#) ⁸⁶³[XML Table Creator](#) ⁸⁶⁴

11.1.11.10   GroupBox

Available [Clarity](#) ⁹⁶³ Properties

None

Default naming convention ([Design>](#) ¹⁰⁰⁵Name)

```
groupBoxn
```

Visual reference (Default) at design time

Remarks

Enables the grouping of controls on the current form in the [Design area](#) ⁸⁵⁵. A grid can also be applied to help with the sizing and positioning of controls

Implementation

Connection and data
N/A

Appearance
Once a group box has been placed the current form in the Design area and sized using the handles, drag existing controls and or place any new controls inside the confines of the group box boundary. The group box can then be moved and all controls contained within the group box will be moved at the same time. The group box label can be configured using the Appearance> 1000 Text property. The grid can be toggled using the Appearance> 1000 DrawGrid property. Configure other generic appearance settings as desired using the Appearance 1000 properties.

Error handling
N/A

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.11   Label

Available Clarity 963 Properties

None

Default naming convention (Design> 1003 Name)

```
labeln
```

Visual reference (Default) at design time

```
label1
```
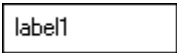
Remarks

Enables the independent labelling of controls on the current project form in the Design area 855 .

Implementation

Connection and data
N/A

Appearance
Once a label has been placed the current form in the Design area and sized using the handles, edit the label caption using the Appearance> 1000 Text property. Configure other generic appearance settings as desired using the Appearance 1000 properties.

Error handling
N/A

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.12 LoadJobButton

Available   Clarity [963] **Properties**

ClarityID [884]	ErrorHandling [885]	JobName [914]	

Default naming convention (Design> [1003]**Name)**

```
loadJobButtonn
```

Visual reference (Default) at design time

loadJobButton1

Remarks

Enables a defined job to be loaded on the connected Clarity [886] system.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID [884]). You can then configure the job path and name (JobName [914]).

Appearance

Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling

Error reporting relating to the loading of the specified job can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the LoadJobButton control to load the designated job.

11.1.11.12.1 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

913   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

N/A

Remarks

Gets or sets the name of an available [Clarity] 886 control present in the current project.

Related properties

[_Clarity>] 963 [ChannelNumber] 885
[_Clarity>] 963 [ErrorHandling] 885

11.1.11.12.2   ErrorHandling

Controls hosting this property

[AirStatus] 882	[Clarity] 886	[ClarityConnectionStatus] 891	[CuePageButton] 894
[CueTakePageButton] 897	[DropDownListToField] 900	[DropDownListToFields] 903	[DropDownListToGlobalField] 906
[DropDownListToGlobalFields] 906	[LoadJobButton] 913	[TakeButton] 921	[TextBoxToField] 923
[TextBoxToGlobalField] 926	[Ticker] 929	[TickerController] 951	[TriggerButton] 960

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
None		No error handling.
MsgBox		Error shown as message box via [Logging] 915 control.
Log		Error reported in email log via [Logging] 915 control.
MsgBoxLog		Error shown as message box AND reported in email log via [Logging] 915 control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

[_Clarity>] 963 [EmailLogFrom] 916
[_Clarity>] 963 [EmailLogSubject] 916
[_Clarity>] 963 [EmailLogTo] 917
[_Clarity>] 963 [EmailSMTPServer] 917

11.1.11.12.3   JobName

Controls hosting this property

[LoadJobButton] 913			

Type

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   914

Copyright © 2000-2006 Pixel Power Ltd.

```
String
```

Values

Value	Description
`<path>`	UNC or local job path and name.

Default Value

N/A

Remarks

Gets or sets the CG Tools job to load.

Related properties

None

11.1.11.13   Logging

Available [Clarity] 963 **Properties**

[EmailLogFrom] 916	[EmailLogSubject] 916	[EmailLogTo] 917	[EmailSMTPServer] 917
[LogFileDirectory] 918	[LogFileLevel] 918		

Default naming convention ([Design>] 1003 Name)

```
loggin1
```

Visual reference (Default) at design time

LOG logging1
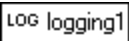
Remarks

Enables logging for a defined [Clarity] 886 control. Logging can be stored via file or email. Inserted Logging controls are listed in the [component window] 854.

Implementation

Each control present in the current project can configured to handle respective errors for that control using the [ErrorHandling] 885 property. This property collaborates with the Logging control in the current project to either display informative message boxes or log errors to a designated file. This log file can be subsequently emailed automatically.

Connection and data

The Logging control can be configured with a number of properties that define how application logging is achieved for the current project.

To configure the logging level, edit the [LogFileLevel] 918 property. The log file directory path and filename are defined using the [LogFileDirectory] 918.

The remaining four properties configure the email settings. Configure the SMTP sever on your network using the [EmailSMTPServer] 917 property. Configure the sender and recipient addresses using the [EmailLogFrom] 916 and [EmailLogTo] 917 properties respectively. Configure the email subject line using the [EmailLogSubject] 916 property.

Appearance

N/A

Error handling

N/A

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.13.1   EmailLogFrom

Controls hosting this property

Logging 915			

Type

```
String
```

Values

Value	Description
`<email address>`	Email address.

Default Value

N/A

Remarks

Gets or sets the email from address for the log.

Related properties

_Clarity> 963 EmailLogSubject 916
_Clarity> 963 EmailLogTo 917
_Clarity> 963 EmailSMTPServer 917

11.1.11.13.2   EmailLogSubject

Controls hosting this property

Logging 915			

Type

```
String
```

Values

Value	Description
`String`	Subject of email.

Default Value

N/A

Remarks

Gets or sets the email subject for the log.

Related properties

_Clarity> 963 EmailLogFrom 916
_Clarity> 963 EmailLogTo 917
_Clarity> 963 EmailSMTPServer 917

11.1.11.13.3 EmailLogTo

Controls hosting this property

[Logging](915)			

Type

```
String
```

Values

Value	Description
`<email address>`	Email address.

Default Value

N/A

Remarks

Gets or sets the email to address for the log.

Related properties

[Clarity>](963) [EmailLogFrom](916)
[Clarity>](963) [EmailLogSubject](916)
[Clarity>](963) [EmailSMTPServer](917)

11.1.11.13.4 EmailSMTPServer

Controls hosting this property

[Logging](915)			

Type

```
String
```

Values

Value	Description
`<smtp server name>`	Name of the SMTP server that will process logging emails.

Default Value

N/A

Remarks

Gets or sets the email SMTP server for email logging.

Related properties

[Clarity>](963) [EmailLogFrom](916)
[Clarity>](963) [EmailLogSubject](916)
[Clarity>](963) [EmailLogTo](917)

11.1.11.13.5 LogFileDirectory

Controls hosting this property

Logging 914			

Type

```
String
```

Values

Value	Description
`<path>`	UNC or local path and name.

Default Value

N/A

Remarks

Gets or sets the log file directory and log file.

Related properties

 Clarity> 963 LogFileLevel 918

11.1.11.13.6 LogFileLevel

Controls hosting this property

Logging 914			

Type

```
String
```

Values

Value	Description	
`String`	Logging level.	
	`INFO`	Log general information.
		`INFO 'PortNumber' has been read from the configuration file for component 'clarity1'and has a value of '10220'`
	`LOW`	Log low level activity e.g. connection status.
		`2006/09/28 16:27:40.07 LOW Clarity connection host integration300 port 10220 feedbackport 10221`
	`MEDIUM`	Log medium level activity e.g. XML errors.
		`2006/09/28 16:26:32.82 MEDIUM XML error 1006`
	`HIGH`	Log high level activity e.g. reading of configuration files.
		`2006/09/28 16:27:45.87 HIGH Reading configuration entries from the log file C:\Program Files\Pixel Power Ltd\Clarity Control Toolbox\Toolbox.config`

Default Value

```
INFO
```

Remarks

Configures the logging level for the selected Logging 914 control.

Related properties

Clarity> ⌐963⌐ LogFileDirectory ⌐918⌐

11.1.11.14   Panel

Available Clarity ⌐963⌐ Properties

None

Default naming convention (Design> ⌐1003⌐ Name)

```
panel1
```

Visual reference (Default) at design time
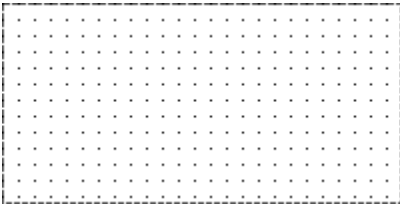
Remarks

Enables the creation of rectangular panel that can be used to visually group associated controls. Should be layered behind associated controls and be configured with a contrasting or complimentary colour. A grid can also be applied to help with the sizing and positioning of controls.

Implementation

Connection and data
N/A

Appearance
Once a panel has been placed the current form in the Design area ⌐855⌐ and sized using the handles, drag existing controls and or place any new controls inside the confines of the panel boundary. The grid can be toggled using the Appearance> ⌐1000⌐ DrawGrid property. Configure other generic appearance settings as desired using the Appearance ⌐1000⌐ properties.

Error handling
N/A

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.15   Pointer

Available Clarity ⌐963⌐ Properties

None

Default naming convention (Design> ⌐1003⌐ Name)

```
None
```

Visual reference (Default) at design time

None

Remarks

Implicitly required at design time by .NET based applications. Enables the software to operate correctly when no controls are selected in the <u>Design area</u> 855. Has no bearing on any aspect of functionality for applications built using the Clarity Control Toolbox software.

Implementation

Not applicable

Usage

Not applicable.

11.1.11.16 TabControl

Available <u>Clarity</u> 963 Properties

None

Default naming convention (<u>Design></u> 1005 Name)

```
tabPage1
```

Visual reference (Default) at design time
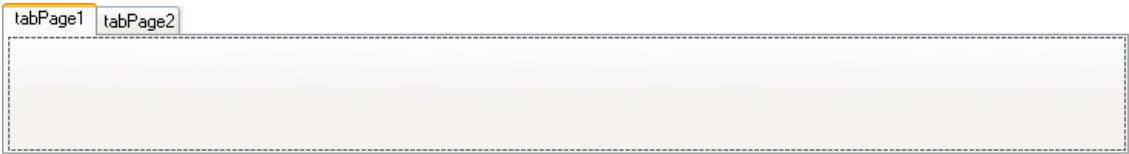
Remarks

Enables the creation of tabbed selection window(s) that can contain control grouped controls. Ideal for use where design space is at premium.

Implementation

Connection and data
N/A

Appearance
Once a tab control has been placed the current form in the <u>Design area</u> 855 and sized using the handles, drag existing controls and or place any new controls inside the confines of the tab control boundary. The tab control can then be moved and all controls contained within the tab control will be moved at the same time.

The number of tabs and their names can be configured using the <u>Behavior></u> 1001 TabPages property. This displays the <u>TabPage Collection Editor dialog box</u> 869. The grid can be toggled using the <u>Appearance></u> 1000 DrawGrid property.

Configure other generic appearance settings as desired using the <u>Appearance</u> 1000 properties.

Error handling
N/A

Usage

When running a built application, there are no usage guidelines for this control.

11.1.11.17   TakeButton

Available Clarity [963] **Properties**

ChannelNumber [883]	ClarityID [884]	ErrorHandling [885]	

Default naming convention (Design> [1003]**Name)**

```
takeButtonn
```

Visual reference (Default) at design time

[takeButton1]

Remarks

Enables a Take command to be actioned on the current channel on the connected Clarity [886] system.

Implementation

Should be used in conjunction with the LoadJobButton [913] control to load a job prior to cueing a page (CuePageButton [894]) and the ClarityConnectionStatus [891] and/or AirStatus [882] controls to monitor the status on the connected Clarity system unit and its available channels.

Connection and data
Configure the control by defining the Clarity system (ClarityID [884]) and channel number to take (ChannelNumber [883]).

Appearance
Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling
Error reporting relating to channel status/readiness can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the TakeButton control to take the cued page on the designated channel.

11.1.11.17.1   ChannelNumber

Controls hosting this property

AirStatus [882]	CuePageButton [894]	CueTakePageButton [897]	TakeButton [921]
TickerController [951]	TriggerButton [960]		

Type

```
Integer
```

Values

921   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
n	Channel number to be monitored, controlled or triggered.

	1	Channel 1.
	2	Channel 2.
	3	Channel 1's auxiliary channel.
	4	Channel 2's auxiliary channel.
	5	User interface (software based) channel.

Default Value

0

Remarks

Gets or sets the active channel number on the connected Clarity 886ᵇ system.

Related properties

_Clarity> 963ᵇ Clarity ID 884ᵇ

11.1.11.17.2   ClarityID

Controls hosting this property

AirStatus 882ᵇ	Clarity 886ᵇ	ClarityConnectionStatus 891ᵇ	CuePageButton 894ᵇ
CueTakePageButton 897ᵇ	DropDownListToField 900ᵇ	DropDownListToFields 903ᵇ	DropDownListToGlobalField 906ᵇ
DropDownListToGlobalFields 908ᵇ	LoadJobButton 913ᵇ	TakeButton 921ᵇ	TextBoxToField 923ᵇ
TextBoxToGlobalField 926ᵇ	Ticker 929ᵇ	TickerController 951ᵇ	TriggerButton 960ᵇ

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886ᵇ control present in the current project.

Related properties

_Clarity> 963ᵇ ChannelNumber 883ᵇ
_Clarity> 963ᵇ ErrorHandling 885ᵇ

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   922

Copyright © 2000-2006 Pixel Power Ltd.

11.1.11.17.3 ErrorHandling

Controls hosting this property

[AirStatus](882)	[Clarity](886)	[ClarityConnectionStatus](891)	[CuePageButton](894)
[CueTakePageButton](897)	[DropDownListToField](900)	[DropDownListToFields](903)	[DropDownListToGlobalField](906)
[DropDownListToGlobalFields](908)	[LoadJobButton](913)	[TakeButton](921)	[TextBoxToField](923)
[TextBoxToGlobalField](926)	[Ticker](929)	[TickerController](951)	[TriggerButton](960)

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via [Logging](915) control.
	Log	Error reported in email log via [Logging](915) control.
	MsgBoxLog	Error shown as message box AND reported in email log via [Logging](915) control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

[Clarity>](963)[EmailLogFrom](916)
[Clarity>](963)[EmailLogSubject](916)
[Clarity>](963)[EmailLogTo](917)
[Clarity>](963)[EmailSMTPServer](917)

11.1.11.18 TextBoxToField

Available [Clarity](963) Properties

[ClarityID](884)	[ErrorHandling](885)	[FieldNumber](902)	[PageNumber](896)

Default naming convention ([Design>](1003)Name)

```
textBoxToField1
```

Visual reference (Default) at design time

Remarks

Enables a numbered page template field on a selected page on the current channel on the connected [Clarity](886) system to be filled by user defined text. The designated field can be updated using an instance of the [TriggerButton](960).

923   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID ⌐884¬). You can then configure the page template field number (FieldNumber ⌐902¬) and the page number (PageNumber ⌐896¬). This page number is fixed and cannot be updated dynamically. The page number defined is usually a dynamic template page.

Appearance

A default string can be specified using the Appearance> ⌐1000¬Text property. Configure other generic appearance settings as desired using the Appearance ⌐1000¬ properties.

Error handling

Error reporting can be configured using the ErrorHandling ⌐885¬ property. Logging for a Clarity control is achieved using the Logging ⌐915¬ control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the TextBoxToField control to make the text cursor active within the box, then enter the desired text string to fill the designated page template field on the designated page.

11.1.11.18.1   ClarityID

Controls hosting this property

AirStatus ⌐882¬	Clarity ⌐886¬	ClarityConnectionStatus ⌐891¬	CuePageButton ⌐894¬
CueTakePageButton ⌐897¬	DropDownListToField ⌐900¬	DropDownListToFields ⌐903¬	DropDownListToGlobalField ⌐906¬
DropDownListToGlobalFields ⌐906¬	LoadJobButton ⌐913¬	TakeButton ⌐921¬	TextBoxToField ⌐923¬
TextBoxToGlobalField ⌐926¬	Ticker ⌐929¬	TickerController ⌐951¬	TriggerButton ⌐960¬

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity ⌐886¬ control present in the current project.

Related properties

Clarity> ⌐963¬ChannelNumber ⌐883¬
Clarity> ⌐963¬ErrorHandling ⌐885¬

11.1.11.18.2 ErrorHandling

Controls hosting this property

[AirStatus](#) [882]	[Clarity](#) [886]	[ClarityConnectionStatus](#) [891]	[CuePageButton](#) [894]
[CueTakePageButton](#) [897]	[DropDownListToField](#) [900]	[DropDownListToFields](#) [903]	[DropDownListToGlobalField](#) [906]
[DropDownListToGlobalFields](#) [908]	[LoadJobButton](#) [913]	[TakeButton](#) [921]	[TextBoxToField](#) [923]
[TextBoxToGlobalField](#) [926]	[Ticker](#) [929]	[TickerController](#) [951]	[TriggerButton](#) [960]

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via [Logging](#) [915] control.
	Log	Error reported in email log via [Logging](#) [915] control.
	MsgBoxLog	Error shown as message box AND reported in email log via [Logging](#) [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

[Clarity>](#) [963] [EmailLogFrom](#) [916]
[Clarity>](#) [963] [EmailLogSubject](#) [916]
[Clarity>](#) [963] [EmailLogTo](#) [917]
[Clarity>](#) [963] [EmailSMTPServer](#) [917]

11.1.11.18.3 FieldNumber

Controls hosting this property

[DropDownListToField](#) [900]	[DropDownListToFields](#) [903]	[TextBoxToField](#) [923]	

Type

```
Integer
```

Values

Value	Description
nnnn	Page template field number.

Default Value

```
0
```

Remarks

Gets or sets the page template field number to update on the page specified using the _Clarity>_ [963] PageNumber [896] property.

Related properties

Clarity> [963] PageNumber [896]

11.1.11.18.4   PageNumber

Controls hosting this property

CuePageButton [894]	CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]
TextBoxToField [923]	Ticker [929]		

Type

```
Integer
```

Values

Value	Description
nnnn	Page number.

Default Value

0

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity [886] system.

Related properties

None

11.1.11.19   TextBoxToGlobalField

Available _Clarity_ [963] Properties

ClarityID [884]	ErrorHandling [885]	GlobalFieldNumber [908]	UpdateDelay [929]

Default naming convention (Design> [1003] Name)

```
textBoxToGlobalField1
```

Visual reference (Default) at design time

Remarks

Enables a global field on the current channel on the connected Clarity [886] system to be filled by user defined text.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID [884]). You can then configure the global field number (GlobalFieldNumber [908]). Configure the interval to wait (UpdateDelay) [929] after input has ceased before the global field is updated whilst focus is still within the TextBoxToGlobalField control.

Appearance

A default string can be specified using the Appearance> [1000] Text property. Configure other generic appearance settings as desired using the Appearance [1000] properties.

Error handling

Error reporting can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the TextBoxToGlobalField control to make the text cursor active within the box, then enter the desired text string to fill the designated global field. The field is updated after the configured update delay.

11.1.11.19.1 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

Clarity> [963] ChannelNumber [883]
Clarity> [963] ErrorHandling [885]

11.1.11.19.2 ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via Logging [915] control.
	Log	Error reported in email log via Logging [915] control.
	MsgBoxLog	Error shown as message box AND reported in email log via Logging [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

 Clarity> [963] EmailLogFrom [916]
 Clarity> [963] EmailLogSubject [916]
 Clarity> [963] EmailLogTo [917]
 Clarity> [963] EmailSMTPServer [917]

11.1.11.19.3   GlobalFieldNumber

Controls hosting this property

DropDownListToGlobalField [906]	DropDownListToGlobalFields [908]	TextBoxToGlobalField [926]	

Type

```
Integer
```

Values

Value	Description
nnnn	Global field number.

Default Value

```
0
```

Remarks

Gets or sets the global field number to update.

Related properties

None

11.1.11.19.4   UpdateDelay

Controls hosting this property

[TextBoxToGlobalField] 926			

Type

```
Integer
```

Values

Value	Description
nnnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the interval to wait in milliseconds, after input has ceased, before updating the global field (whilst focus is still within the control).

Related properties

None

11.1.11.20   Ticker

Available **[**Clarity] 963** Properties**

[ClarityID] 884	[ControllerID] 933	[CrawlSeparator] 934	[ErrorHandling] 885
[GridCaptionColour] 935	[GridCaptionFont] 935	[GridForeColour] 936	[GridHeaderBackColour] 937
[GridHeaderFont] 937	[GridHeaderForeColour] 938	[GridLineColour] 938	[GridLineStyle] 939
[InternalControllerCaptionDelay] 939	[InternalControllerClearLogoAfterCaptionDelay] 940	[InternalControllerDataOffScreenColour] 940	[InternalControllerDataOnScreenColour] 940
[InternalControllerDataOnScreenLabelFont] 941	[InternalControllerDataStoreID] 942	[InternalControllerForeColour] 942	[InternalControllerIndicatorLabelCaption] 943
[InternalControllerRememberWhichRowWasSentLast] 943	[LogoBeforeTicker] 943	[PageNumber] 896	[RowActiveColor] 944
[RowCrossHatchingColor] 945	[RowDisconnectedColor] 945	[RowInactiveColor] 946	[ShowGridCaption] 946
[ShowGridColumnHeaders] 946	[SpacingBetweenElements] 947	[TickerControlColor] 947	[TickerID] 948
[TickerOnScreenCaption] 948	[TickerType] 948	[TickerTypeFieldNumber] 949	[TriggerCharacterForNewLogo] 949
[UseOwnController] 950	[UseThisTickerCaption] 950	[UseThisTickerCheckBoxPresent] 951	

Default naming convention ([Design>] 1003 Name)

```
tickern
```

Visual reference (Default) at design time and whilst controlling a job

929   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
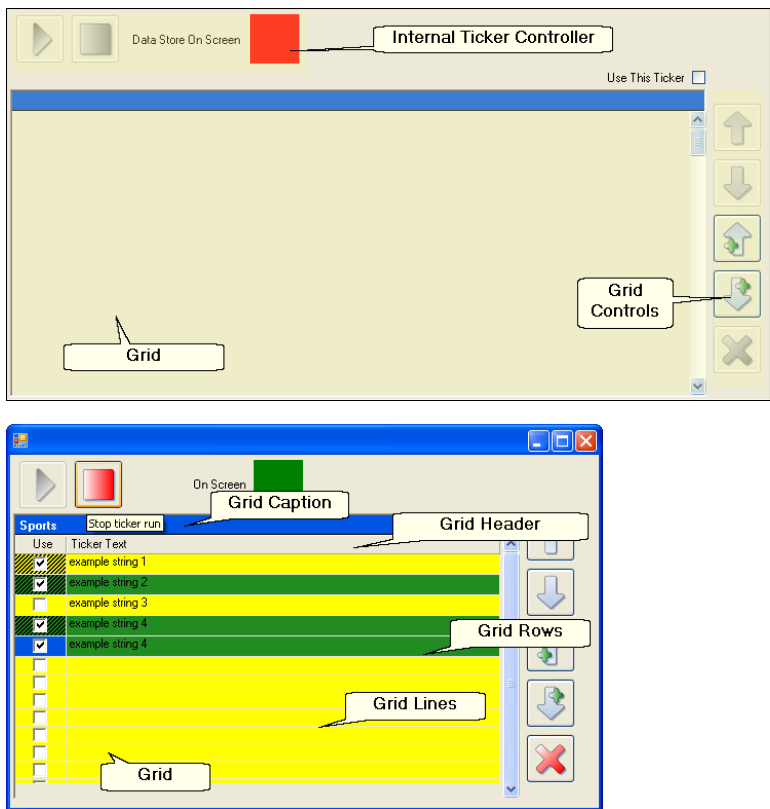
Remarks

Inserts a Ticker control and associated controller on the current form in the Design area 855. The Ticker control can be controlled either by its own internal ticker controller or by an instance of the TickerController 951 control.

Implementation

Connection and data	
Internal Ticker Controller	To configure that an instance of the TickerController 951 control will be used to control the selected Ticker control, configure the UseOwnController 950 property (`False`). You must then specify an ID using the ControllerID 933 property (the instance of the TickerController 951 control must be configured with the same ID). In this situation, all properties pre-fixed with *InternalController* are not relevant.
	If are using the internal ticker controller (UseOwnController 950 is set to `True`), the following can be settings can be configured. The ID of the Data Store that the Ticker control will send data to can be configured using the InternalControllerDataStoreID 942 property.
	Configure that the Ticker control remembers which row was played last using the InternalControllerRememberWhichRowWasSentLast 943 property.

Connection and data	
Entire control	Configure the Ticker controls' connection settings by defining the Clarity system (ClarityID 884). Configure the ID of the Ticker control using the TickerID 948 property. *If an instance of the TickerController 951 control will be used to control the selected Ticker control (UseOwnController 950 property is set to* `False`*), you can optionally configure whether you want to have the ability to select whether the Ticker control is included for control when the application is running. Configure the UseThisTickerCheckBoxPresent 951 control to enable/ disable the display of the Use This Ticker check box.*
	Caption
	Configure the caption heading which is also required for data storage using the TickerOnScreenCaption 948 property. You can then configure the page number containing the caption heading using the PageNumber 896 property. Configure the field number that displays the caption heading (to be updated by the control) using the TickerTypeFieldNumber 949 property. A delay can be configured using the InternalControllerCaptionDelay 939 and InternalControllerClearLogoAfterCaptionDelay 940 properties so that the corresponding caption appears/disappears at the correct time (with regard to the position of the first element on screen) when the Play and Stop controls are selected respectively.
	Ticker separator, spacing and triggering
	Configure whether you want to include a logo separator before/after each ticker element using the LogoBeforeTicker 943. Define the logo to be used using the CrawlSeparator 934 property. Configure the spacing between ticker elements using the SpacingBetweenElements 947 property. Configure the trigger key that will be used to trigger a new logo for a new ticker category using the TriggerCharacterForNewLogo 949 property.

Appearance	
Internal Ticker Controller	If you are using the internal ticker controller (UseOwnController 950 is set to `True`), the following can be settings can be configured. Configuration of the text label (`Data Store On Screen` is the default label) is achieved using the InternalControllerIndicatorLabelCaption 943 property; the colour and font of the text supplied by the InternalControllerIndicatorLabelCaption 943 property can be configured using the InternalControllerForeColour 942 and InternalControllerDataOnScreenLabelFont 941 properties respectively. The square indicator that shows when a Data Store is on screen can be configured with two different colours, depending on the state of the Data Store. Use the InternalControllerDataOffScreenColour 940 and InternalControllerDataOnScreenColour 940 respectively.
Entire control	If you have configured the selected Ticker control to display the Use This Ticker check box (using the UseThisTickerCheckBoxPresent 951 property), you can optionally configure the label text using the UseThisTickerCaption 950 property. The background colour of the control and all controls contained within the control can be configured using the TickerControlColor 947 property.
Grid	Configure the colour of the text shown within the Grid area using the GridForeColour 936 property.
Grid Caption	The Grid Caption area can be configured. To enable the display of the Grid Caption at the top of the Grid, configure the ShowGridCaption 946 property. Configure the text to be shown in the Grid Caption area using the TickerType 948 property. This text is totally separate from the actual caption heading that is displayed on pages (see Caption in the table above and the TickerOnScreenCaption 948 property). Configure the colour and font used in the Grid Caption area using the GridCaptionColour 935 and GridCaptionFont 935 properties respectively.
Grid Header	The Grid Header area can be configured. To enable the display of the Grid Header area, configure the ShowGridColumnHeaders 946 property. Configure the font to be used by the text in the Grid Header area using the GridHeaderFont 937 property. Configure the foreground and background colour used in the Grid Header area using the GridHeaderBackColour 937 and GridHeaderForeColour 938 properties respectively.
Grid Line	Lines that separate rows within the Grid can be configured. Configure the line colour and style using the GridLineColour 938 and GridLineStyle 939 properties respectively.

Appearance	
Grid Row	The status of individual rows is indicated using differing colours. Configure the colour of active rows (ticker elements that are on-screen) using the RowActiveColor ⁹⁴⁴ property. The colour of active rows (ticker elements that are off-screen) can be configured using the RowInactiveColor ⁹⁴⁶ property. Configure the cross hatching colour of rows that have reached the connected Clarity system using the RowCrossHatchingColor ⁹⁴⁵ property. Configure the colour of rows that are disconnected using the RowDisconnectedColor ⁹⁴⁵.

Error handling	
Error reporting can be configured using the ErrorHandling ⁸⁸⁵ property. Logging for a Clarity control is achieved using the Logging ⁹¹⁵ control and therefore must be present in the current project.	

Usage

When the Ticker control is active, text within each grid row (under the Ticker Text heading by default) can be edited by clicking the cursor within a row and using the keyboard to edit or enter new text for that ticker element.

You can only edit grid rows that are not active (those that are NOT highlighted using the RowActiveColor ⁹⁴⁴ property).

Grid rows that are cross hatched using the RowCrossHatchingColor ⁹⁴⁵ property colour are ticker elements that have reached the connected Clarity system, but are not yet visible on the playout screen. You can select which rows are used by the continuous ticker animation by checking the box adjacent to the row (these check boxes are by default shown in the Use column).

Control	Description
	Stops an the instance of the Ticker ⁹²⁹ control assigned using the ControllerID ⁹³³ property.
	Starts an the instance of the Ticker ⁹²⁹ control assigned using the ControllerID ⁹³³ property.
Data Store on Screen	Indicates whether the data supplied by the defined Data Store using the DataStoreID ⁹⁵⁷ or InternalControllerDataStoreID ⁹⁴² property is currently on screen or off screen.

Control	Description
	Moves the selected grid row above the previous row.
	Moves the selected grid row below the previous row.
	Inserts an empty grid row above the selected row.
	Inserts an empty grid row above the selected row.
	Deletes the selected grid row.

11.1.11.20.1 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

Clarity> [963] ChannelNumber [883]
Clarity> [963] ErrorHandling [885]

11.1.11.20.2 ControllerID

Controls hosting this property

Ticker [929]	TickerController [951]	

Type

```
Integer
```

Values

Value	Description
n	ID of the controller for the selected Ticker [929] control.

Default Value

0

Remarks

Gets or sets the ID of the controller for the selected Ticker [929] control, only if it is to be controlled by an instance of a TickerController [951] control instead of being controlled by its own control.

Related properties

None

11.1.11.20.3 CrawlSeparator

Controls hosting this property

Ticker 929			

Type

```
String
```

Values

Value	Description
`<path>`	UNC or local path and name
	Example
	`[logo:filename=C:\01 STV\Crawl\Logos\SatLogo_small.tif, Filloption=1]`

Default Value

N/A

Remarks

Gets or sets the image file (logo) that will separate ticker elements.

Related properties

 Clarity> 963 LogoBeforeTicker 943

11.1.11.20.4 ErrorHandling

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

```
String
```

Values

Value	Description
`String`	Error handling type for selected control.
`None`	No error handling.
`MsgBox`	Error shown as message box via Logging 915 control.
`Log`	Error reported in email log via Logging 915 control.
`MsgBoxLog`	Error shown as message box AND reported in email log via Logging 915 control.

Default Value

```
None
```

Remarks

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   934

Copyright © 2000-2006 Pixel Power Ltd.

Configures the how errors are handled for the selected control.

Related properties

Clarity> |963| EmailLogFrom |916|
Clarity> |963| EmailLogSubject |916|
Clarity> |963| EmailLogTo |917|
Clarity> |963| EmailSMTPServer |917|

11.1.11.20.5   GridCaptionColour

Controls hosting this property

Ticker |929|			

Type

Colour

Default Value

ActiveCaption

Remarks

Gets or sets the background colour of the Grid Caption area on the selected Ticker |929| control.

Related properties

Clarity> |963| GridCaptionFont |935|

11.1.11.20.6   GridCaptionFont

Controls hosting this property

Ticker |929|			

Type

Multiple settings

Default Value

Microsoft Sans Serif, 8.25pt, style=Bold

Remarks

Gets or sets the font settings for caption defined using the _Clarity>_ |963| TickerType |948| that is shown in the Grid Caption area on the selected Ticker |929| control. You can configure settings using the Font dialog box |865| or by expanding the group to configure the sub-properties listed below.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the Font dialog box |865|.

Value	Type	Description
Name	Font	Defines the name of font.
Size	Integer	Defines the point size of font.

Value	Type	Description	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file WinGDI.h.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> 963 GridCaptionColour 935

SEE ALSO

Font dialog box 865

11.1.11.20.7   GridForeColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

ControlText

Remarks

Gets or sets the colour of the text shown within the Grid area on the selected Ticker 929 control.

Related properties

Clarity> 963 GridCaptionColour 935
Clarity> 963 GridCaptionFont 935

11.1.11.20.8 GridHeaderBackColour

Controls hosting this property

[Ticker] 929

Type

`Colour`

Default Value

`Control`

Remarks

Gets or sets the background colour of all headers in the Grid Header area on the selected [Ticker] 929 control.

Related properties

[Clarity>] 963 [GridHeaderFont] 937
[Clarity>] 963 [GridHeaderForeColour] 938

11.1.11.20.9 GridHeaderFont

Controls hosting this property

[Ticker] 929

Type

`Multiple settings`

Default Value

`Microsoft Sans Serif, 8.25pt`

Remarks

Gets or sets the font settings for all headers in the Grid Header area on the selected [Ticker] 929 control. You can configure settings using the [Font dialog box] 865 or by expanding the group to configure the sub-properties listed below.

Sub Properties

Available sub-properties can also be configured by selecting the 🔲 Browse button which displays the [Font dialog box] 865.

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.

Value	Type	Description	
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> |963| GridCaptionColour |935|

SEE ALSO

Font dialog box |865|

11.1.11.20.10   GridHeaderForeColour

Controls hosting this property

Ticker |929|			

Type

Colour

Default Value

ControlText

Remarks

Gets or sets the foreground colour of all headers in the Grid Header area on the selected Ticker |929| control.

Related properties

Clarity> |963| GridHeaderBackColour |937|
Clarity> |963| GridHeaderFont |937|

11.1.11.20.11   GridLineColour

Controls hosting this property

Ticker |929|			

Type

Colour

Default Value

Control

Remarks

Gets or sets the colour of all lines in the Grid area on the selected Ticker 929 control.

Related properties

 Clarity> 963 GridLineStyle 939

11.1.11.20.12 GridLineStyle

Controls hosting this property

Ticker 929			

Type

```
String
```

Values

Type	Description	
String	Line style.	
	None	No line style.
	Solid	Solid grid line style.

Default Value

```
Solid
```

Remarks

Gets or sets the line style of all lines in the Grid area on the selected Ticker 929 control.

Related properties

 Clarity> 963 GridLineColour 938

11.1.11.20.13 InternalControllerCaptionDelay

Controls hosting this property

Ticker 929			

Type

```
Integer
```

Value

Value	Description
nnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the Clarity> 963 TickerOnScreenCaption 948 property) is shown on an aired page. This needs to be adjusted so that when a ticker control starts, the corresponding caption appears at the correct time with regard to the position of the first element on screen.

Related properties

 Clarity> 963 TickerOnScreenCaption 948

Clarity> 963 InternalControllerClearLogoAfterCaptionDelay 940

11.1.11.20.14 InternalControllerClearLogoAfterCaptionDelay

Controls hosting this property

Ticker 929			

Type

Integer

Values

Value	Description
nnnnnnnnn	Time delay in milliseconds.

Default Value

0

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the Clarity> 963 TickerOnScreenCaption 948 property) is cleared on an aired page after Stop is pressed.

Related properties

 Clarity> 963 InternalControllerCaptionDelay 939

11.1.11.20.15 InternalControllerDataOffScreenColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

Red

Remarks

Gets or sets the indicator colour when ticker data/elements are off screen.

Related properties

 Clarity> 963 InternalControllerDataOnScreenColour 940

11.1.11.20.16 InternalControllerDataOnScreenColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

`Green`

Remarks

Gets or sets the indicator colour when ticker data/elements are on screen.

Related properties

 Clarity> [963]InternalControllerDataOffScreenColour [940]

11.1.11.20.17   InternalControllerDataOnScreenLabelFont

Controls hosting this property

Ticker [929]			

Type

`Multiple settings`

Default Value

`Microsoft Sans Serif, 8.25pt`

Remarks

Gets or sets the font for the text supplied by the _Clarity>_ [963]InternalControllerIndicatorLabelCaption [943] property.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the Font dialog box [865].

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.

Value	Type	Description	
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> [963] InternalControllerForeColour [942]
Clarity> [963] InternalControllerIndicatorLabelCaption [943]

SEE ALSO

Font dialog box [865]

11.1.11.20.18   InternalControllerDataStoreID

Controls hosting this property

Ticker [929]			

Type

Integer

Values

Value	Description
nnnn	ID of the Data Store store.

Default Value

0

Remarks

Gets or sets the ID of the Data Store that the selected Ticker [929] control will send data to.

Related properties

None

11.1.11.20.19   InternalControllerForeColour

Controls hosting this property

Ticker [929]			

Type

Colour

Default Value

ControlText

Remarks

Gets or sets the foreground colour of the text supplied by the _Clarity>_ [963] InternalControllerIndicatorLabelCaption [943] property.

Related properties

Clarity> [963] InternalControllerDataOnScreenLabelFont [941]

11.1.11.20.20 InternalControllerIndicatorLabelCaption

Controls hosting this property

Ticker [929]			

Type

```
String
```

Values

Value	Description
`<label>`	Text label.

Default Value

```
Data Store On Screen
```

Remarks

Gets or sets the text label on the internal ticker controller on the selected Ticker [929] control.

Related properties

Clarity> [963] InternalControllerDataOnScreenLabelFont [941]
Clarity> [963] InternalControllerForeColour [942]

11.1.11.20.21 InternalControllerRememberWhichRowWasSentLast

Controls hosting this property

Ticker [929]			

Type

```
Boolean
```

Values

Value	Description
`True`	Last sent row is remembered.
`False`	First usable row will always be played.

Default Value

```
False
```

Remarks

Gets or sets whether the selected Ticker [929] control remembers which row was played last. Set to `False` to enable the first useable row always be played when Start is pressed.

Related properties

None

11.1.11.20.22 LogoBeforeTicker

Controls hosting this property

Ticker [929]			

Type

```
Boolean
```

Values

Value	Description
True	Cel/Logo inserted BEFORE each ticker element.
False	Cel/Logo inserted AFTER each ticker element.

Default Value

```
False
```

Remarks

Gets or sets whether the cel or logo defined using the Clarity> [963] CrawlSeparator [934] property comes before OR after each ticker element.

Related properties

 Clarity> [963] CrawlSeparator [934]

11.1.11.20.23 PageNumber

Controls hosting this property

CuePageButton [894]	CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]
TextBoxToField [923]	Ticker [929]		

Type

```
Integer
```

Values

Value	Description
nnnn	Page number.

Default Value

```
0
```

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity [886] system.

Related properties

None

11.1.11.20.24 RowActiveColor

Controls hosting this property

Ticker [929]			

Type

```
Colour
```

Default Value

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   944

Copyright © 2000-2006 Pixel Power Ltd.

`Forest Green`

Remarks

Gets or sets the colour for active rows (that are NOT editable) in the Grid Row area.

Related properties

Clarity> [963] [RowCrossHatchingColor](945)
Clarity> [963] [RowDisconnectedColor](945)
Clarity> [963] [RowInactiveColor](946)

11.1.11.20.25 RowCrossHatchingColor

Controls hosting this property

[Ticker](929)			

Type

`Colour`

Default Value

`Black`

Remarks

Gets or sets the colour for cross hatching for the Grid Row area that will signify row data has reached the connected [Clarity](886) system.

Related properties

Clarity> [963] [RowActiveColor](944)
Clarity> [963] [RowDisconnectedColor](945)
Clarity> [963] [RowInactiveColor](946)

11.1.11.20.26 RowDisconnectedColor

Controls hosting this property

[Ticker](929)			

Type

`Colour`

Default Value

`Gray`

Remarks

Gets or sets the colour for rows in the Grid Row area that are currently disconnected from a [Clarity](886) system.

Related properties

Clarity> [963] [RowActiveColor](944)
Clarity> [963] [RowCrossHatchingColor](945)
Clarity> [963] [RowInactiveColor](946)

11.1.11.20.27 RowInactiveColor

Controls hosting this property

Ticker 929

Type

```
Colour
```

Default Value

<mark>Yellow</mark>

Remarks

Gets or sets the colour for inactive rows (that are editable) in the Grid Row area.

Related properties

_Clarity> 963 RowActiveColor 944
_Clarity> 963 RowCrossHatchingColor 945
_Clarity> 963 RowDisconnectedColor 945

11.1.11.20.28 ShowGridCaption

Controls hosting this property

Ticker 929

Type

```
Boolean
```

Values

Value	Description
True	Show caption in the Grid Caption area.
False	Hide caption in the Grid Caption area.

Default Value

```
True
```

Remarks

Gets or sets whether the caption defined using the _Clarity> 963 TickerType 948 is shown in the Grid Caption area on the selected Ticker 929 control.

Related properties

_Clarity> 963 TickerType 948

11.1.11.20.29 ShowGridColumnHeaders

Controls hosting this property

Ticker 929

Type

```
Boolean
```

Values

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006 946

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
True	Show Grid Header area.
False	Hide Grid Header area.

Default Value

True

Remarks

Gets or sets whether the Grid Header area (column headers) are visible on the selected Ticker 929 control.

Related properties

_Clarity> 963 ShowGridCaption 946

11.1.11.20.30   SpacingBetweenElements

Controls hosting this property

Ticker 929			

Type

Integer

Values

Value	Description
n	Spacing in pixels.

Default Value

0

Remarks

Gets or sets the spacing in pixels between each ticker element.

Related properties

None

11.1.11.20.31   TickerControlColor

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

Control

Remarks

Gets or sets the background colour of the selected Ticker 929 control and all controls contained within it.

Related properties

None

11.1.11.20.32 TickerID

Controls hosting this property

[Ticker] 929			

Type

Integer

Values

Value	Description
nnnnnnnn	ID of the current [Ticker] 929 control.

Default Value

0

Remarks

Gets or sets the internal ID of the selected [Ticker] 929 control.

Related properties

None

11.1.11.20.33 TickerOnScreenCaption

Controls hosting this property

[Ticker] 929			

Type

String

Values

Value	Description
<caption>	Caption text.

Default Value

N/A

Remarks

Gets or sets the caption title to be displayed on an aired page when text of this ticker appears.

Related properties

[_Clarity>] 963 [TickerType] 948

11.1.11.20.34 TickerType

Controls hosting this property

[Ticker] 929			

Type

```
String
```

Values

Value	Description
<caption>	Caption text.

Default Value

N/A

Remarks

Gets or sets the text for the caption shown in the Grid Caption area of the selected Ticker 929 control.

Related properties

Clarity> 963 ShowGridCaption 946

11.1.11.20.35 TickerTypeFieldNumber

Controls hosting this property

Ticker 929			

Type

```
Integer
```

Values

Value	Description
nnnn	Page template field number.

Default Value

0

Remarks

Gets or sets the page template field number that will display the caption defined using the Clarity> 963 TickerType 948 .

Related properties

Clarity> 963 TickerType 948
Clarity> 963 TickerOnScreenCaption 948

11.1.11.20.36 TriggerCharacterForNewLogo

Controls hosting this property

Ticker 929			

Type

```
Alphanumeric character
```

Values

Value	Description
Alphanumeric character	Character that will trigger an new logo.

Default Value

N/A

Remarks

Gets or sets the character to send to the connected Clarity |886ʰ| system to trigger a new logo for a new ticker category.

Related properties

None

11.1.11.20.37 UseOwnController

Controls hosting this property

Ticker |929ʰ|			

Type

```
Boolean
```

Values

Value	Description
True	Use own internal controller.
False	Use an instance of a TickerController |951ʰ| control in the current project.

Default Value

```
True
```

Remarks

Gets or sets whether the current Ticker |929ʰ| control uses its own internal controller (shown at the top of the control) OR an instance of a TickerController |951ʰ| control in the current project. An instance of the TickerController |951ʰ| control can be specified using the _Clarity> |963ʰ|ControllerID |933ʰ| property.

Related properties

 _Clarity> |963ʰ|ControllerID |933ʰ|

11.1.11.20.38 UseThisTickerCaption

Controls hosting this property

Ticker |929ʰ|			

Type

```
String
```

Values

Value	Description
<label>	Check box label.

Default Value

```
Use This Ticker
```

Remarks

Gets or sets the label for the check box used to determine whether the controller on the current Ticker [929] control is to be used.

Related properties

 Clarity> [963] UseThisTickerCheckBoxPresent [951]

11.1.11.20.39   UseThisTickerCheckBoxPresent

Controls hosting this property

Ticker [929]			

Type

```
Boolean
```

Values

Value	Description
True	Display check box and caption.
False	Hide check box and caption.

Default Value

```
True
```

Remarks

Gets or sets whether the current Ticker [929] control displays the check box and caption, enabling the user to determine whether the current Ticker [929] control is to be used.

Related properties

 Clarity> [963] UseThisTickerCaption [950]

11.1.11.21   TickerController

Available Clarity [963] Properties

CaptionDelay [953]	ChannelNumber [883]	ClarityID [884]	ClearLogoAfterCaptionDelay [954]
ControllerBackColor [955]	ControllerID [933]	DataOffScreenColour [955]	DataOnScreenColour [956]
DataOnScreenLabelFont [956]	DataStoreID [957]	ErrorHandling [885]	ForeColour [958]
IndicatorLabelCaption [959]	TickersRememberWhichRowWasSentLast [959]		

Default naming convention (Design> [1005] Name)

```
tickerControllern
```

Visual reference (Default) at design time
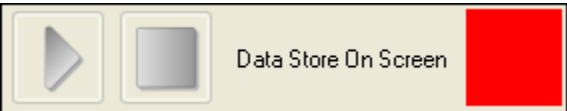
Remarks

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Enables a Ticker [929] control to be controlled on the current channel on the connected Clarity [886] system.

Implementation

Connection and data

Configure the controls' connection settings by defining the Clarity system (ClarityID [884]) and channel number to cue (ChannelNumber [883]). To configure the selected TickerController to control an instance of the Ticker control on the current form, specify an ID using the ControllerID [933] property (the instance of the Ticker [929] control must be configured with the same ID).

The ID of the data store that tickers controlled by the selected TickerController [951] control will send data to can be configured using the DataStoreID [957] property.

A delay can be configured using the CaptionDelay [953] and ClearLogoAfterCaptionDelay [954] properties so that the corresponding caption appears/disappears at the correct time (with regard to the position of the first element on screen) when the Play and Stop controls are selected respectively.

Configure that instances of the Ticker [929] control that are controlled by the selected TickerController remember which row was played last using the TickersRememberWhichRowWasSentLast [959] property.

Appearance

The background colour of the control can be configured using the ControllerBackColor [955] property.

Configuration of the text label (`Data Store On Screen` is the default label) is achieved using the IndicatorLabelCaption [959] property; the colour and font of the text supplied by the IndicatorLabelCaption [959] property can be configured using the ForeColour [958] and DataOnScreenLabelFont [956] properties respectively.

The square indicator that shows when a Data Store is on screen can be configured with two different colours, depending on the state of the Data Store. Use the DataOffScreenColour [955] and DataOnScreenColour [956] respectively.

Error handling

Error reporting can be configured using the ErrorHandling [885] property. Logging for a Clarity control is achieved using the Logging [915] control and therefore must be present in the current project.

Usage

Control	Description
	Stops an the instance of the Ticker [929] control assigned using the ControllerID [933] property.
	Starts an the instance of the Ticker [929] control assigned using the ControllerID [933] property.
Data Store on Screen	Indicates whether the data supplied by the defined data store using the DataStoreID [957] property is currently on screen or off screen.

11.1.11.21.1   CaptionDelay

Controls hosting this property

[TickerController](#) 951			

Type

```
Integer
```

Values

Value	Description
nnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the time delay in milliseconds when showing the caption title (set using the [Clarity>](#) 963 [TickerOnScreenCaption](#) 948 property) on an aired page. This needs to be adjusted so that when a ticker control starts, the corresponding caption to appears at the correct time with regard to the position of the first element on screen.

Related properties

[Clarity>](#) 963 [TickerOnScreenCaption](#) 948
[Clarity>](#) 963 [ClearLogoAfterCaptionDelay](#) 954

11.1.11.21.2   ChannelNumber

Controls hosting this property

[AirStatus](#) 882	[CuePageButton](#) 894	[CueTakePageButton](#) 897	[TakeButton](#) 921
[TickerController](#) 951	[TriggerButton](#) 960		

Type

```
Integer
```

Values

Value	Description	
n	Channel number to be monitored, controlled or triggered.	
	1	Channel 1.
	2	Channel 2.
	3	Channel 1's auxiliary channel.
	4	Channel 2's auxiliary channel.
	5	User interface (software based) channel.

Default Value

```
0
```

Remarks

Gets or sets the active channel number on the connected [Clarity](#) 886 system.

Related properties

Clarity> 963 Clarity ID 884

11.1.11.21.3 ClarityID

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

```
String
```

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity 886 control present in the current project.

Related properties

Clarity> 963 ChannelNumber 883
Clarity> 963 ErrorHandling 885

11.1.11.21.4 ClearLogoAfterCaptionDelay

Controls hosting this property

TickerController 951			

Type

```
Integer
```

Values

Value	Description
nnnnnnnnn	Time delay in milliseconds.

Default Value

0

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the _Clarity>_ 963 TickerOnScreenCaption 948 property) is cleared on an aired page after Stop is pressed.

Related properties

Clarity> |963| CaptionDelay |953|

11.1.11.21.5 ControllerBackColor

Controls hosting this property

TickerController |951|			

Type

Colour

Default Value

Control

Remarks

Gets or sets the background colour for the selected TickerController |951| control.

Related properties

Clarity> |963| ForeColour |958|

11.1.11.21.6 ControllerID

Controls hosting this property

Ticker |929|	TickerController |951|		

Type

Integer

Values

Value	Description
n	ID of the controller for the selected Ticker |929| control.

Default Value

0

Remarks

Gets or sets the ID of the controller for the selected Ticker |929| control, only if it is to be controlled by an instance of a TickerController |951| control instead of being controlled by its own control.

Related properties

None

11.1.11.21.7 DataOffScreenColour

Controls hosting this property

TickerController |951|			

Type

Colour

Default Value

Red

Remarks

Gets or sets the indicator colour when ticker data/elements are off screen.

Related properties

 Clarity> 963 DataOnScreenColour 956

11.1.11.21.8   DataOnScreenColour

Controls hosting this property

TickerController 951			

Type

Colour

Default Value

Lime

Remarks

Gets or sets the indicator colour when ticker data/elements are on screen.

Related properties

 Clarity> 963 DataOffScreenColour 955

11.1.11.21.9   DataOnScreenLabelFont

Controls hosting this property

TickerController 951			

Type

Multiple settings

Default Value

Microsoft Sans Serif, 8.25pt

Remarks

Gets or sets the font for the text supplied by the Clarity> 963 IndicatorLabelCaption 959 property.

Sub Properties

Available sub-properties can also be configured by selecting the Browse button which displays the Font dialog box 865 .

Value	Type	Description
Name	Font	Defines the name of font.
Size	Integer	Defines the point size of font.

Value	Type	Description	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

_Clarity> 963 ForeColour 958

SEE ALSO

Font dialog box 865

11.1.11.21.10 DataStoreID

Controls hosting this property

TickerController 951

Type

Integer

Values

Value	Description
nnnn	ID of the Data Store.

Default Value

0

Remarks

Gets or sets the ID of the Data Store that tickers controlled by the selected TickerController 951 control will send data to.

Related properties

None

11.1.11.21.11   ErrorHandling

Controls hosting this property

[AirStatus](#) 882	[Clarity](#) 886	[ClarityConnectionStatus](#) 891	[CuePageButton](#) 894
[CueTakePageButton](#) 897	[DropDownListToField](#) 900	[DropDownListToFields](#) 903	[DropDownListToGlobalField](#) 906
[DropDownListToGlobalFields](#) 908	[LoadJobButton](#) 913	[TakeButton](#) 921	[TextBoxToField](#) 923
[TextBoxToGlobalField](#) 926	[Ticker](#) 929	[TickerController](#) 951	[TriggerButton](#) 960

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
	None	No error handling.
	MsgBox	Error shown as message box via [Logging](#) 915 control.
	Log	Error reported in email log via [Logging](#) 915 control.
	MsgBoxLog	Error shown as message box AND reported in email log via [Logging](#) 915 control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

[Clarity>](#) 963 [EmailLogFrom](#) 916
[Clarity>](#) 963 [EmailLogSubject](#) 916
[Clarity>](#) 963 [EmailLogTo](#) 917
[Clarity>](#) 963 [EmailSMTPServer](#) 917

11.1.11.21.12   ForeColour

Controls hosting this property

[TickerController](#) 951			

Type

```
Colour
```

Default Value

```
ControlText
```

Remarks

Gets or sets the foreground colour of the text supplied by the [Clarity>](#) 963 [IndicatorLabelCaption](#) 959 property.

Related properties

  Clarity> |963⟩ DataOnScreenLabelFont |956⟩

11.1.11.21.13 IndicatorLabelCaption

Controls hosting this property

TickerController |951⟩			

Type

```
String
```

Values

Value	Description
`<label>`	Text label.

Default Value

```
Data Store On Screen
```

Remarks

Gets or sets the text label on the TickerController |951⟩ control.

Related properties

  Clarity> |963⟩ DataOnScreenLabelFont |956⟩
  Clarity> |963⟩ ForeColour |958⟩

11.1.11.21.14 TickersRememberWhichRowWasSent

Controls hosting this property

TickerController |951⟩			

Type

```
Boolean
```

Values

Value	Description
`True`	Last sent row is remembered.
`False`	First usable row will always be played.

Default Value

```
False
```

Remarks

Gets or sets whether instance(s) of the Ticker |929⟩ control controlled by the current TickerController |951⟩ control remember which row was played last. Set to False to enable the first useable row to always be played when Start is pressed.

Related properties

None

959   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

11.1.11.22   TriggerButton

Available _Clarity_ |963⟩ Properties

ChannelNumber |883⟩	ClarityID |884⟩	ErrorHandling |885⟩	TriggerLetter |962⟩

Default naming convention (Design> |1003⟩Name)

```
triggerButtonn
```

Visual reference (Default) at design time

triggerButton1
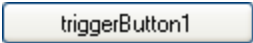
Remarks

Enables animations to be triggered on the current channel on the connected Clarity |886⟩ system.

Implementation

Connection and data

Configure the control by defining the Clarity system (ClarityID |884⟩) and channel number to control (ChannelNumber |883⟩). Configure the letter that will trigger animations using the TriggerLetter |962⟩ property.

Appearance

Configure other generic appearance settings as desired using the Appearance |1000⟩ properties.

Error handling

Error reporting relating to channel status/readiness can be configured using the ErrorHandling |885⟩ property. Logging for a Clarity control is achieved using the Logging |915⟩ control and therefore must be present in the current project.

Usage

With the designated Clarity system connected, select an instance of the TriggerButton control to trigger an animation on the current page.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   960

Copyright © 2000-2006 Pixel Power Ltd.

11.1.11.22.1 ChannelNumber

Controls hosting this property

AirStatus [882]	CuePageButton [894]	CueTakePageButton [897]	TakeButton [921]
TickerController [951]	TriggerButton [960]		

Type

Integer

Values

Value	Description
n	Channel number to be monitored, controlled or triggered.
1	Channel 1.
2	Channel 2.
3	Channel 1's auxiliary channel.
4	Channel 2's auxiliary channel.
5	User interface (software based) channel.

Default Value

0

Remarks

Gets or sets the active channel number on the connected Clarity [886] system.

Related properties

_Clarity> [963] Clarity ID [884]

11.1.11.22.2 ClarityID

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [908]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

961   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Gets or sets the name of an available Clarity [886] control present in the current project.

Related properties

Clarity> [963] ChannelNumber [883]
Clarity> [963] ErrorHandling [885]

11.1.11.22.3 ErrorHandling

Controls hosting this property

AirStatus [882]	Clarity [886]	ClarityConnectionStatus [891]	CuePageButton [894]
CueTakePageButton [897]	DropDownListToField [900]	DropDownListToFields [903]	DropDownListToGlobalField [906]
DropDownListToGlobalFields [906]	LoadJobButton [913]	TakeButton [921]	TextBoxToField [923]
TextBoxToGlobalField [926]	Ticker [929]	TickerController [951]	TriggerButton [960]

Type

```
String
```

Values

Value	Description	
String	Error handling type for selected control.	
None		No error handling.
MsgBox		Error shown as message box via Logging [915] control.
Log		Error reported in email log via Logging [915] control.
MsgBoxLog		Error shown as message box AND reported in email log via Logging [915] control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> [963] EmailLogFrom [916]
Clarity> [963] EmailLogSubject [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.11.22.4 TriggerLetter

Controls hosting this property

TriggerButton [960]			

Type

```
Alphanumeric character
```

Values

Value	Description
`<trigger>`	Trigger character.

Default Value

N/A

Remarks

Gets or sets the character to send to the connected Clarity [886] system that will trigger animations on pages currently aired.

Related properties

_Clarity> [963] ChannelNumber [883]

11.1.12 Properties reference

The following properties are available for configuration for the available controls [881]. Applicable properties for each control are listed.

Property group	Description
_Clarity [963]	Clarity Control Toolbox dedicated properties relating to specific configuration of the dedicated Clarity [855] group of controls.
Accessibility [1000]	Enables configuration of accessibility attributes.
Appearance [1000]	Enables configuration of appearance properties for ALL available controls. Commonly configured properties include control background colour or image definition and related image configuration.
Behavior [1001]	Enables configuration of behavioural attributes for the current form or selected control.
Data [1003]	Enables configuration of data related attributes for the current form or selected control.
Design [1003]	Enables configuration of design related attributes for the current form or selected control.
Focus [1003]	Enables configuration of validation when controls have focus.
Layout [1004]	Enables configuration of layout properties for the current form or selected control.
Misc [1004]	Enables configuration of miscellaneous properties for the current form or selected control.
Window Style [1005]	Enables configuration of application styling attributes for the current form.

SEE ALSO

Properties list [857]

11.1.12.1 _Clarity

The following properties are available for configuration for the available `_Clarity` group of controls [881]. Applicable properties for each control are listed.

Name	Description
AutoReconnect [887]	Enables reconnection to the Clarity XML Socket Server [1010] if the connected Clarity system loses connection with an application built using the Clarity Control Toolbox.
AutoReconnectInterval [887]	Defines the time elapsed until automatic reconnection is initiated with the Clarity XML Socket Server [1010].
BusyColor [883]	Gets or sets the busy status colour for the on-air channel on the connected Clarity [886] system.
CaptionDelay [953]	Gets or sets the time delay in milliseconds when showing the caption title (set using the _Clarity> [963] TickerOnScreenCaption [948] property) on an aired page.

Name	Description
ChannelNumber [883]	Gets or sets the active channel number on the connected Clarity [886] system.
ClarityID [884]	Gets or sets the name of an available Clarity [886] control present in the current project.
ClearLogoAfterCaptionDelay [954]	Gets or sets the time delay in milliseconds before the caption title (set using the _Clarity> [963] TickerOnScreenCaption [948] property) is cleared on an aired page after Stop is pressed.
ConnectedColor [892]	Gets or sets the connected status colour for the on-air channel on the connected Clarity [886] system.
ControllerBackColor [955]	Gets or sets the background colour for the selected TickerController [951] control.
ControllerID [933]	Gets or sets the ID of the controller for the selected Ticker [929] control, only if it is to be controlled by an instance of a TickerController [951] control instead of being controlled by its own control.
CrawlSeparator [934]	Gets or sets the image file (logo) that will separate ticker elements.
DataOffScreenColour [955]	Gets or sets the indicator colour when ticker data/elements are off screen.
DataOnScreenColour [956]	Gets or sets the indicator colour when ticker data/elements are on screen.
DataOnScreenLabelFont [956]	Gets or sets the font for the text supplied by the _Clarity> [963] IndicatorLabelCaption [959] property.
DataStoreID [957]	Gets or sets the ID of the Data Store that tickers controlled by the selected TickerController [951] control will send data to.
DisconnectedColor [892]	Gets or sets the disconnected status colour for the on-air channel on the connected Clarity [886] system.
Display [884]	Gets or sets the character(s) that will prefix the channel number being monitored on the connected Clarity [886] system
EmailLogFrom [916]	Gets or sets the email from address for the log.
EmailLogSubject [916]	Gets or sets the email subject for the log.
EmailLogTo [917]	Gets or sets the email to address for the log.
EmailSMTPServer [917]	Gets or sets the email SMTP server for email logging.
ErrorHandling [885]	Configures the how errors are handled for the selected control.
FeedbackPortNumber [889]	Gets or sets the feedback port number on the connected Clarity [886] system. This port is used to monitor/receive feedback commands via a copy of the Clarity XML Socket Server [1010] on the connected Clarity system.
FieldNumber [902]	Gets or sets the page template field number to update on the page specified using the _Clarity> [963] PageNumber [896] property.
ForeColour [958]	Gets or sets the foreground colour of the text supplied by the _Clarity> [963] IndicatorLabelCaption [959] property.
GridCaptionColour [935]	Gets or sets the background colour of the Grid Caption area on the selected Ticker [929] control.
GridCaptionFont [935]	Gets or sets the font settings for the caption defined using the _Clarity> [963] TickerType [948] that is shown in the Grid Caption area on the selected Ticker [929] control.
GridForeColour [936]	Gets or sets the colour of the text shown within the Grid area on the selected Ticker [929] control.
GridHeaderBackColour [937]	Gets or sets the background colour of all headers in the Grid Header area on the selected Ticker [929] control.
GridHeaderFont [937]	Gets or sets the font settings for all headers in the Grid Header area on the selected Ticker [929] control.

Name	Description
GridHeaderForeColour 938	Gets or sets the foreground colour of all headers in the Grid Header area on the selected Ticker 929 control.
GridLineColour 938	Gets or sets the colour of all lines in the Grid area on the selected Ticker 929 control.
GridLineStyle 939	Gets or sets the line style of all lines in the Grid area on the selected Ticker 929 control.
HostName 890	Gets or sets the DNS hostname of the Clarty system that the built application will connect to.
IndicatorLabelCaption 959	Gets or sets the text label on the TickerController 951 control.
InternalControllerCaptionDelay 939	Gets or sets the time delay in milliseconds before the caption title (set using the _Clarity> 963 TickerOnScreenCaption 948 property) is shown on an aired page.
InternalControllerClearLogoAfterCaptionDelay 940	Gets or sets the time delay in milliseconds before the caption title (set using the _Clarity> 963 TickerOnScreenCaption 948 property) is cleared on an aired page after Stop is pressed.
InternalControllerDataOffScreenColour 940	Gets or sets the indicator colour when ticker data/elements are off screen.
InternalControllerDataOnScreenColour 940	Gets or sets the indicator colour when ticker data/elements are on screen.
InternalControllerDataOnScreenLabelFont 941	Gets or sets the font for the text supplied by the _Clarity> 963 InternalControllerIndicatorLabelCaption 943 property.
InternalControllerDataStoreID 942	Gets or sets the ID of the Data Store that selected Ticker 929 control will send data to.
InternalControllerForeColour 942	Gets or sets the foreground colour of the text supplied by the InternalControllerIndicatorLabelCaption 943 property.
InternalControllerIndicatorLabelCaption 943	Gets or sets the foreground colour of the text supplied by the _Clarity> 963 InternalControllerIndicatorLabelCaption 943 property.
JobName 914	Gets or sets the CG Tools job to load.
LogFileDirectory 918	Gets or sets the log file directory and log file.
LogFileLevel 918	Configures the logging level for the selected Logging 914 control.
LogoBeforeTicker 943	Gets or sets whether the cel or logo defined using the _Clarity> 963 CrawlSeparator 934 property comes before OR after each ticker element.
PageNumber 896	Gets or sets the page number to update, cue or take on the connected Clarity 886 system.
PortNumber 890	Gets or sets the port number on the connected Clarity 886 system. This port is used to transmit commands to a copy of the Clarity XML Socket Server 1010 on the connected Clarity system.
ReadyColor 885	Gets or sets the ready status colour for the on-air channel on the connected Clarity 886 system.
RowActiveColor 944	Gets or sets the colour for active rows (that are NOT editable) in the Grid Row area.
RowCrossHatchingColor 945	Gets or sets the colour for cross hatching for the Grid Row area that will signify row that data has reached the connected Clarity 886 system.
RowDisconnectedColor 945	Gets or sets the colour for rows in the Grid Row area that are currently disconnected from a Clarity 886 system.
RowInactiveColor 946	Gets or sets the colour for inactive rows (that are editable) in the Grid Row area.
ShowGridCaption 946	Gets or sets whether the caption defined using the _Clarity> 963 TickerType 948 is shown in the Grid Caption area on the selected Ticker 929 control.

Name	Description
ShowGridColumnHeaders 946	Gets or sets whether the Grid Header area (column headers) is visible on the selected Ticker 929 control.
SpacingBetweenElements 947	Gets or sets the spacing in pixels between each ticker element.
StoppedColor 886	Gets or sets the stopped colour for the on-air channel on the connected Clarity 886 system.
TickerControlColor 947	Gets or sets the background colour of the control and all controls contained within it.
TickerID 948	Gets or sets the internal ID of the selected Ticker 929 control.
TickerOnScreenCaption 948	Gets or sets the caption title to be displayed on an aired page when text of this ticker appears.
TickersRememberWhichRowWasSentLast 959	Gets or sets whether instance(s) of the Ticker 929 control controlled by the current TickerController 951 control remember which row was played last.
TickerType 948	Gets or sets the text for the caption shown in the Grid Caption area of the selected Ticker 929 control.
TickerTypeFieldNumber 949	Gets or sets the page template field number that will display the caption defined using the _Clarity> 963 TickerType 948.
TriggerCharacterForNewLogo 949	Gets or sets the character to send to the connected Clarity 886 system to trigger a new logo for a new ticker category.
TriggerLetter 962	Gets or sets the character to send to the connected Clarity 886 system that will trigger animations on pages currently aired.
UpdateDelay 929	Gets or sets the interval to wait in milliseconds, after input has ceased, before updating the global field (whilst focus is still within the control).
UseOwnController 950	Gets or sets whether the current Ticker 929 control uses its own internal controller (shown at the top of the control) OR an instance of a TickerController 951 control in the current project.
UseThisTickerCaption 950	Gets or sets the label for the check box used to determine whether the controller on the current Ticker 929 control is to be used.
UseThisTickerCheckBoxPresent 951	Gets or sets whether the current Ticker 929 control displays the check box and caption, enabling the user to determine whether the current Ticker 929 control is to be used.
XmlDataFile 905	Sets the source of XML data for the selected drop-down list box.

11.1.12.1.1   AutoReconnect

Controls hosting this property

Clarity 886			

Type

```
Boolean
```

Values

Value	Description
True	Automatically reconnect.
False	Do not reconnect automatically.

Default Value

```
False
```

Remarks

If the Clarity XML Socket Server [1010] on the connected Clarity system loses connection with an application built using the Clarity Control Toolbox, this property enables reconnection.

Related properties

Clarity> [963] AutoReconnectInterval [887]

11.1.12.1.2 AutoReconnectInterval

Controls hosting this property

Clarity [886]			

Type

```
Integer
```

Values

Value	Description
nnnnnnnn	Connection interval in milliseconds.

Default Value

```
5000
```

Remarks

If the Clarity XML Socket Server [1010] on the connected Clarity system loses connection with an application built using the Clarity Control Toolbox, this property defines the time elapsed until automatic reconnection is initiated with the Clarity XML Socket Server.

Related properties

Clarity> [963] AutoReconnect [887]

11.1.12.1.3 BusyColor

Controls hosting this property

AirStatus [882]			

Type

```
Colour
```

Default Value

Orange

Remarks

Gets or sets the busy status colour for the on-air channel on the connected Clarity [886] system.

Related properties

Clarity> [963] ReadyColor [885]
Clarity> [963] StoppedColor [886]

11.1.12.1.4 CaptionDelay

Controls hosting this property

TickerController 951			

Type

```
Integer
```

Values

Value	Description
nnnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the time delay in milliseconds when showing the caption title (set using the _Clarity> 963 TickerOnScreenCaption 948 property) on an aired page. This needs to be adjusted so that when a ticker control starts, the corresponding caption to appears at the correct time with regard to the position of the first element on screen.

Related properties

_Clarity> 963 TickerOnScreenCaption 948
_Clarity> 963 ClearLogoAfterCaptionDelay 954

11.1.12.1.5 ChannelNumber

Controls hosting this property

AirStatus 882	CuePageButton 894	CueTakePageButton 897	TakeButton 921
TickerController 951	TriggerButton 960		

Type

```
Integer
```

Values

Value	Description	
n	Channel number to be monitored, controlled or triggered.	
	1	Channel 1.
	2	Channel 2.
	3	Channel 1's auxiliary channel.
	4	Channel 2's auxiliary channel.
	5	User interface (software based) channel.

Default Value

```
0
```

Remarks

Gets or sets the active channel number on the connected Clarity 886 system.

Related properties

Clarity> |963| Clarity ID |884|

11.1.12.1.6 ClarityID

Controls hosting this property

AirStatus |882|	Clarity |886|	ClarityConnectionStatus |891|	CuePageButton |894|
CueTakePageButton |897|	DropDownListToField |900|	DropDownListToFields |903|	DropDownListToGlobalField |906|
DropDownListToGlobalFields |908|	LoadJobButton |913|	TakeButton |921|	TextBoxToField |923|
TextBoxToGlobalField |926|	Ticker |929|	TickerController |951|	TriggerButton |960|

Type

String

Values

Value	Description
String	Internally referenced name of an available Clarity control.

Default Value

N/A

Remarks

Gets or sets the name of an available Clarity |886| control present in the current project.

Related properties

Clarity> |963| ChannelNumber |883|
Clarity> |963| ErrorHandling |885|

11.1.12.1.7 ClearLogoAfterCaptionDelay

Controls hosting this property

TickerController |951|			

Type

Integer

Values

Value	Description
nnnnnnnn	Time delay in milliseconds.

Default Value

0

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the _Clarity>_ |963| TickerOnScreenCaption |948| property) is cleared on an aired page after Stop is pressed.

Related properties

Clarity> |963| CaptionDelay |953|

11.1.12.1.8   ConnectedColor

Controls hosting this property

ClarityConnectionStatus |89|			

Type

Colour

Default Value

Green

Remarks

Gets or sets the connected status colour for the on-air channel on the connected Clarity |886| system.

Related properties

Clarity> |963| DisconnectedColor |892|
Clarity> |963| ReadyColor |885|
Clarity> |963| StoppedColor |886|

11.1.12.1.9   ControllerBackColor

Controls hosting this property

TickerController |951|			

Type

Colour

Default Value

Control

Remarks

Gets or sets the background colour for the selected TickerController |951| control.

Related properties

Clarity> |963| ForeColour |958|

11.1.12.1.10   ControllerID

Controls hosting this property

Ticker |929|	TickerController |951|		

Type

Integer

Values

Value	Description
n	ID of the controller for the selected Ticker |929| control.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   970

Copyright © 2000-2006 Pixel Power Ltd.

Default Value

0

Remarks

Gets or sets the ID of the controller for the selected Ticker 929 control, only if it is to be controlled by an instance of a TickerController 951 control instead of being controlled by its own control.

Related properties

None

11.1.12.1.11   CrawlSeparator

Controls hosting this property

Ticker 929			

Type

String

Values

Value	Description
<path>	UNC or local path and name
	Example
	`[logo:filename=C:\01 STV\Crawl\Logos\SatLogo_small.tif, Filloption=1]`

Default Value

N/A

Remarks

Gets or sets the image file (logo) that will separate ticker elements.

Related properties

 Clarity> 963 LogoBeforeTicker 943

11.1.12.1.12   DataOffScreenColour

Controls hosting this property

TickerController 951			

Type

Colour

Default Value

Red

Remarks

Gets or sets the indicator colour when ticker data/elements are off screen.

Related properties

 Clarity> 963 DataOnScreenColour 956

11.1.12.1.13 DataOnScreenColour

Controls hosting this property

[TickerController](951)

Type

```
Colour
```

Default Value

Lime

Remarks

Gets or sets the indicator colour when ticker data/elements are on screen.

Related properties

[_Clarity>](963)[DataOffScreenColour](955)

11.1.12.1.14 DataOnScreenLabelFont

Controls hosting this property

[TickerController](951)

Type

```
Multiple settings
```

Default Value

```
Microsoft Sans Serif, 8.25pt
```

Remarks

Gets or sets the font for the text supplied by the [_Clarity>](963)[IndicatorLabelCaption](959) property.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the [Font dialog box](865).

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.

Value	Type	Description	
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

_Clarity> [963] ForeColour [958]

SEE ALSO

Font dialog box [865]

11.1.12.1.15 DataStoreID

Controls hosting this property

TickerController [951]

Type

Integer

Values

Value	Description
nnnn	ID of the Data Store.

Default Value

0

Remarks

Gets or sets the ID of the Data Store that tickers controlled by the selected TickerController [951] control will send data to.

Related properties

None

11.1.12.1.16 DisconnectedColor

Controls hosting this property

ClarityConnectionStatus [891]

Type

Colour

Default Value

Red

Remarks

Gets or sets the disconnected status colour for the on-air channel on the connected Clarity 886 system.

Related properties

Clarity> 963 ConnectedColor 892
Clarity> 963 ReadyColor 885
Clarity> 963 StoppedColor 886

11.1.12.1.17 Display

Controls hosting this property

AirStatus 882			

Type

```
String
```

Values

Value	Description	
`<display syntax>`	Information type.	
	`Ch`	Channel number.
	`ChPage`	Channel number and page number.
	`ChPageName`	Channel number, page number and page name.

Default Value

```
Ch
```

Remarks

Gets or sets the character(s) that will prefix the channel number being monitored on the connected Clarity 886 system

Related properties

Clarity> 963 BusyColor 883
Clarity> 963 ReadyColor 885
Clarity> 963 StoppedColor 886

11.1.12.1.18 EmailLogFrom

Controls hosting this property

Logging 915			

Type

```
String
```

Values

Value	Description
`<email address>`	Email address.

Default Value

N/A

Remarks

Gets or sets the email from address for the log.

Related properties

Clarity> [963] EmailLogSubject [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.12.1.19   EmailLogSubject

Controls hosting this property

Logging [915]			

Type

```
String
```

Values

Value	Description
String	Subject of email.

Default Value

N/A

Remarks

Gets or sets the email subject for the log.

Related properties

Clarity> [963] EmailLogFrom [916]
Clarity> [963] EmailLogTo [917]
Clarity> [963] EmailSMTPServer [917]

11.1.12.1.20   EmailLogTo

Controls hosting this property

Logging [915]			

Type

```
String
```

Values

Value	Description
<email address>	Email address.

Default Value

N/A

Remarks

Gets or sets the email to address for the log.

Related properties

 Clarity> 963 EmailLogFrom 916
 Clarity> 963 EmailLogSubject 916
 Clarity> 963 EmailSMTPServer 917

11.1.12.1.21 EmailSMTPServer

Controls hosting this property

Logging 915			

Type

String

Values

Value	Description
`<smtp server name>`	Name of the SMTP server that will process logging emails.

Default Value

N/A

Remarks

Gets or sets the email SMTP server for email logging.

Related properties

 Clarity> 963 EmailLogFrom 916
 Clarity> 963 EmailLogSubject 916
 Clarity> 963 EmailLogTo 917

11.1.12.1.22 ErrorHandling

Controls hosting this property

AirStatus 882	Clarity 886	ClarityConnectionStatus 891	CuePageButton 894
CueTakePageButton 897	DropDownListToField 900	DropDownListToFields 903	DropDownListToGlobalField 906
DropDownListToGlobalFields 908	LoadJobButton 913	TakeButton 921	TextBoxToField 923
TextBoxToGlobalField 926	Ticker 929	TickerController 951	TriggerButton 960

Type

String

Values

Value	Description	
`String`	Error handling type for selected control.	
	`None`	No error handling.
	`MsgBox`	Error shown as message box via Logging 915 control.
	`Log`	Error reported in email log via Logging 915 control.
	`MsgBoxLog`	Error shown as message box AND reported in email log via Logging 915 control.

Default Value

```
None
```

Remarks

Configures the how errors are handled for the selected control.

Related properties

Clarity> 963 EmailLogFrom 916
Clarity> 963 EmailLogSubject 916
Clarity> 963 EmailLogTo 917
Clarity> 963 EmailSMTPServer 917

11.1.12.1.23   FeedbackPortNumber

Controls hosting this property

Clarity 886			

Type

```
Integer
```

Values

Value	Description
nnnnn	Port number.

Default Value

```
10221
```

Remarks

Gets or sets the feedback port number on the connected Clarity 886 system. This port is used to monitor/receive feedback commands via a copy of the Clarity XML Socket Server 1010 on the connected Clarity system.

Related properties

Clarity> 963 Clarity ID 884

11.1.12.1.24   FieldNumber

Controls hosting this property

DropDownListToField 900	DropDownListToFields 903	TextBoxToField 923	

Type

```
Integer
```

Values

Value	Description
nnnn	Page template field number.

Default Value

```
0
```

Remarks

Gets or sets the page template field number to update on the page specified using the Clarity> 963 PageNumber 896 property.

Related properties

 Clarity> 963 PageNumber 896

11.1.12.1.25   ForeColour

Controls hosting this property

TickerController 951

Type

Colour

Default Value

ControlText

Remarks

Gets or sets the foreground colour of the text supplied by the Clarity> 963 IndicatorLabelCaption 959 property.

Related properties

 Clarity> 963 DataOnScreenLabelFont 956

11.1.12.1.26   GlobalFieldNumber

Controls hosting this property

DropDownListToGlobalField 906	DropDownListToGlobalFields 908	TextBoxToGlobalField 926	

Type

Integer

Values

Value	Description
nnnn	Global field number.

Default Value

0

Remarks

Gets or sets the global field number to update.

Related properties

None

11.1.12.1.27   GridCaptionColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

ActiveCaption

Remarks

Gets or sets the background colour of the Grid Caption area on the selected Ticker |929⟩ control.

Related properties

 Clarity> |963⟩GridCaptionFont |935⟩

11.1.12.1.28 GridCaptionFont

Controls hosting this property

Ticker |929⟩			

Type

Multiple settings

Default Value

Microsoft Sans Serif, 8.25pt, style=Bold

Remarks

Gets or sets the font settings for caption defined using the Clarity> |963⟩TickerType |948⟩ that is shown in the Grid Caption area on the selected Ticker |929⟩ control. You can configure settings using the Font dialog box |865⟩ or by expanding the group to configure the sub-properties listed below.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the Font dialog box |865⟩.

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file WinGDI.h.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.

Value	Type	Description	
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> 963 GridCaptionColour 935

SEE ALSO

Font dialog box 865

11.1.12.1.29   GridForeColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

`ControlText`

Remarks

Gets or sets the colour of the text shown within the Grid area on the selected Ticker 929 control.

Related properties

Clarity> 963 GridCaptionColour 935
Clarity> 963 GridCaptionFont 935

11.1.12.1.30   GridHeaderBackColour

Controls hosting this property

Ticker 929			

Type

Colour

Default Value

Control

Remarks

Gets or sets the background colour of all headers in the Grid Header area on the selected Ticker 929 control.

Related properties

Clarity> 963 GridHeaderFont 937
Clarity> 963 GridHeaderForeColour 938

11.1.12.1.31 GridHeaderFont

Controls hosting this property

Ticker 929			

Type

```
Multiple settings
```

Default Value

```
Microsoft Sans Serif, 8.25pt
```

Remarks

Gets or sets the font settings for all headers in the Grid Header area on the selected Ticker 929 control. You can configure settings using the Font dialog box 865 or by expanding the group to configure the sub-properties listed below.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the Font dialog box 865.

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> 963 GridCaptionColour 935

SEE ALSO

Font dialog box 865

981   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

11.1.12.1.32 GridHeaderForeColor

Controls hosting this property

Ticker [929]

Type

Colour

Default Value

ControlText

Remarks

Gets or sets the foreground colour of all headers in the Grid Header area on the selected Ticker [929] control.

Related properties

Clarity> [963] GridHeaderBackColour [937]
Clarity> [963] GridHeaderFont [937]

11.1.12.1.33 GridLineColor

Controls hosting this property

Ticker [929]

Type

Colour

Default Value

Control

Remarks

Gets or sets the colour of all lines in the Grid area on the selected Ticker [929] control.

Related properties

Clarity> [963] GridLineStyle [939]

11.1.12.1.34 GridLineStyle

Controls hosting this property

Ticker [929]

Type

String

Values

Type	Description	
String	Line style.	
	None	No line style.
	Solid	Solid grid line style.

Default Value

```
Solid
```

Remarks

Gets or sets the line style of all lines in the Grid area on the selected Ticker 929 control.

Related properties

_Clarity> 963 GridLineColour 938

11.1.12.1.35   HostName

Controls hosting this property

Clarity 886			

Type

```
String
```

Values

Value	Description
`<hostname>`	DNS hostname (e.g. `localhost`).

Default Value

N/A

Remarks

Gets or sets the DNS hostname of the Clarty system that the built application will connect to.

Related properties

None

11.1.12.1.36   IndicatorLabelCaption

Controls hosting this property

TickerController 951			

Type

```
String
```

Values

Value	Description
`<label>`	Text label.

Default Value

```
Data Store On Screen
```

Remarks

Gets or sets the text label on the TickerController 951 control.

Related properties

_Clarity> 963 DataOnScreenLabelFont 956
_Clarity> 963 ForeColour 958

11.1.12.1.37   InternalControllerCaptionDelay

Controls hosting this property

[Ticker] 929

Type

```
Integer
```

Value

Value	Description
nnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the [Clarity>] 963 [TickerOnScreenCaption] 948 property) is shown on an aired page. This needs to be adjusted so that when a ticker control starts, the corresponding caption appears at the correct time with regard to the position of the first element on screen.

Related properties

[Clarity>] 963 [TickerOnScreenCaption] 948
[Clarity>] 963 [InternalControllerClearLogoAfterCaptionDelay] 940

11.1.12.1.38   InternalControllerClearLogoAfterCaptionDelay

Controls hosting this property

[Ticker] 929

Type

```
Integer
```

Values

Value	Description
nnnnnnnn	Time delay in milliseconds.

Default Value

```
0
```

Remarks

Gets or sets the time delay in milliseconds before the caption title (set using the [Clarity>] 963 [TickerOnScreenCaption] 948 property) is cleared on an aired page after Stop is pressed.

Related properties

[Clarity>] 963 [InternalControllerCaptionDelay] 939

11.1.12.1.39   InternalControllerDataOffScreenColour

Controls hosting this property

Ticker 929

Type

```
Colour
```

Default Value

Red

Remarks

Gets or sets the indicator colour when ticker data/elements are off screen.

Related properties

Clarity> 963 InternalControllerDataOnScreenColour 940

11.1.12.1.40   InternalControllerDataOnScreenColour

Controls hosting this property

Ticker 929

Type

```
Colour
```

Default Value

Green

Remarks

Gets or sets the indicator colour when ticker data/elements are on screen.

Related properties

Clarity> 963 InternalControllerDataOffScreenColour 940

11.1.12.1.41   InternalControllerDataOnScreenLabelFont

Controls hosting this property

Ticker 929

Type

```
Multiple settings
```

Default Value

```
Microsoft Sans Serif, 8.25pt
```

Remarks

Gets or sets the font for the text supplied by the _Clarity>_ 963 InternalControllerIndicatorLabelCaption 943 property.

Sub Properties

Available sub-properties can also be configured by selecting the [...] Browse button which displays the Font dialog box 865 .

Value	Type	Description	
Name	Font	Defines the name of font.	
Size	Integer	Defines the point size of font.	
Unit	String	World	Defines the world coordinate system unit as the unit of measure.
		Pixel	Defines a device pixel as the unit of measure.
		Point	Defines a printer's point (1/72 inch) as the unit of measure.
		Inch	Defines inches as the unit of measure.
		Document	Defines the document unit (1/300 inch) as the unit of measure.
		Millimeter	Defines millimetres as the unit of measure.
Bold	Boolean	True	Defines bold formatting.
		False	Defines non-bold formatting.
GdiCharSet	Integer	n	Byte value that defines the character set used by the control text. List defined in the Platform SDK header file `WinGDI.h`.
GdiVerticalFont	Boolean	True	Defines that the selected font is derived from a GDI vertical font.
		False	Defines that the selected font is NOT derived from a GDI vertical font.
Italic	Boolean	True	Defines italic formatting.
		False	Defines non-italic formatting
Strikeout	Boolean	True	Defines strikeout formatting.
		False	Defines non-strikeout formatting.
Underline	Boolean	True	Defines underline formatting.
		False	Defines non-underline formatting.

Related properties

Clarity> 963 InternalControllerForeColour 942
Clarity> 963 InternalControllerIndicatorLabelCaption 943

SEE ALSO

Font dialog box 865

11.1.12.1.42   InternalControllerDataStoreID

Controls hosting this property

Ticker 929			

Type

Integer

Values

Value	Description
nnnn	ID of the Data Store store.

Default Value

0

Remarks

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   986

Copyright © 2000-2006 Pixel Power Ltd.

Gets or sets the ID of the Data Store that the selected Ticker [929] control will send data to.

Related properties

None

11.1.12.1.43 InternalControllerForeColour

Controls hosting this property

Ticker [929]			

Type

Colour

Default Value

`ControlText`

Remarks

Gets or sets the foreground colour of the text supplied by the Clarity> [963] InternalControllerIndicatorLabelCaption [943] property.

Related properties

 Clarity> [963] InternalControllerDataOnScreenLabelFont [941]

11.1.12.1.44 InternalControllerIndicatorLabelCaption

Controls hosting this property

Ticker [929]			

Type

String

Values

Value	Description
`<label>`	Text label.

Default Value

`Data Store On Screen`

Remarks

Gets or sets the text label on the internal ticker controller on the selected Ticker [929] control.

Related properties

 Clarity> [963] InternalControllerDataOnScreenLabelFont [941]
 Clarity> [963] InternalControllerForeColour [942]

11.1.12.1.45 InternalControllerRememberWhichRowWasSentLast

Controls hosting this property

Ticker [929]			

Type

```
Boolean
```

Values

Value	Description
True	Last sent row is remembered.
False	First usable row will always be played.

Default Value

```
False
```

Remarks

Gets or sets whether the selected Ticker [929] control remembers which row was played last. Set to `False` to enable the first useable row always be played when Start is pressed.

Related properties

None

11.1.12.1.46 JobName

Controls hosting this property

LoadJobButton [913]			

Type

```
String
```

Values

Value	Description
<path>	UNC or local job path and name.

Default Value

N/A

Remarks

Gets or sets the CG Tools job to load.

Related properties

None

11.1.12.1.47 LogFileDirectory

Controls hosting this property

Logging [914]			

Type

```
String
```

Values

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   988

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
`<path>`	UNC or local path and name.

Default Value

N/A

Remarks

Gets or sets the log file directory and log file.

Related properties

[Clarity>](#) 963 [LogFileLevel](#) 918

11.1.12.1.48 LogFileLevel

Controls hosting this property

[Logging](#) 914			

Type

`String`

Values

Value	Description	
`String`	Logging level.	
	`INFO`	Log general information.
		`INFO 'PortNumber' has been read from the configuration file for component 'clarity1'and has a value of '10220'`
	`LOW`	Log low level activity e.g. connection status.
		`2006/09/28 16:27:40.07 LOW Clarity connection host integration300 port 10220 feedbackport 10221`
	`MEDIUM`	Log medium level activity e.g. XML errors.
		`2006/09/28 16:26:32.82 MEDIUM XML error 1006`
	`HIGH`	Log high level activity e.g. reading of configuration files.
		`2006/09/28 16:27:45.87 HIGH Reading configuration entries from the log file C:\Program Files\Pixel Power Ltd\Clarity Control Toolbox\Toolbox.config`

Default Value

`INFO`

Remarks

Configures the logging level for the selected [Logging](#) 914 control.

Related properties

[Clarity>](#) 963 [LogFileDirectory](#) 918

11.1.12.1.49 LogoBeforeTicker

Controls hosting this property

[Ticker](#) 929			

Type

```
Boolean
```

Values

Value	Description
True	Cel/Logo inserted BEFORE each ticker element.
False	Cel/Logo inserted AFTER each ticker element.

Default Value

```
False
```

Remarks

Gets or sets whether the cel or logo defined using the Clarity> ⁹⁶³CrawlSeparator ⁹³⁴ property comes before OR after each ticker element.

Related properties

 Clarity> ⁹⁶³CrawlSeparator ⁹³⁴

11.1.12.1.50   PageNumber

Controls hosting this property

CuePageButton ⁸⁹⁴	CueTakePageButton ⁸⁹⁷	DropDownListToField ⁹⁰⁰	DropDownListToFields ⁹⁰³
TextBoxToField ⁹²³	Ticker ⁹²⁹		

Type

```
Integer
```

Values

Value	Description
nnnn	Page number.

Default Value

```
0
```

Remarks

Gets or sets the page number to update, cue or take on the connected Clarity ⁸⁸⁶ system.

Related properties

None

11.1.12.1.51   PortNumber

Controls hosting this property

Clarity ⁸⁸⁶			

Type

```
Integer
```

Values

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   990

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
nnnnn	Port number.

Default Value

10220

Remarks

Gets or sets the port number on the connected Clarity [886] system. This port is used to transmit commands to a copy of the Clarity XML Socket Server [1010] on the connected Clarity system.

Related properties

_Clarity> [963] Clarity ID [884]
_Clarity> [963] FeedbackPortNumber [889]

11.1.12.1.52 ReadyColor

Controls hosting this property

AirStatus [882]			

Type

Colour

Default Value

Green

Remarks

Gets or sets the ready status colour for the on-air channel on the connected Clarity [886] system.

Related properties

_Clarity> [963] BusyColor [883]
_Clarity> [963] StoppedColor [886]

11.1.12.1.53 RowActiveColor

Controls hosting this property

Ticker [929]			

Type

Colour

Default Value

Forest Green

Remarks

Gets or sets the colour for active rows (that are NOT editable) in the Grid Row area.

Related properties

_Clarity> [963] RowCrossHatchingColor [945]
_Clarity> [963] RowDisconnectedColor [945]
_Clarity> [963] RowInactiveColor [946]

11.1.12.1.54   RowCrossHatchingColor

Controls hosting this property

Ticker 929			

Type

```
Colour
```

Default Value

```
Black
```

Remarks

Gets or sets the colour for cross hatching for the Grid Row area that will signify row data has reached the connected Clarity 886 system.

Related properties

Clarity> 963 RowActiveColor 944
Clarity> 963 RowDisconnectedColor 945
Clarity> 963 RowInactiveColor 946

11.1.12.1.55   RowDisconnectedColor

Controls hosting this property

Ticker 929			

Type

```
Colour
```

Default Value

```
Gray
```

Remarks

Gets or sets the colour for rows in the Grid Row area that are currently disconnected from a Clarity 886 system.

Related properties

Clarity> 963 RowActiveColor 944
Clarity> 963 RowCrossHatchingColor 945
Clarity> 963 RowInactiveColor 946

11.1.12.1.56   RowInactiveColor

Controls hosting this property

Ticker 929			

Type

```
Colour
```

Default Value

```
Yellow
```

Remarks

Gets or sets the colour for inactive rows (that are editable) in the Grid Row area.

Related properties

 Clarity> 963 RowActiveColor 944
 Clarity> 963 RowCrossHatchingColor 945
 Clarity> 963 RowDisconnectedColor 945

11.1.12.1.57 ShowGridCaption

Controls hosting this property

Ticker 929			

Type

```
Boolean
```

Values

Value	Description
True	Show caption in the Grid Caption area.
False	Hide caption in the Grid Caption area.

Default Value

```
True
```

Remarks

Gets or sets whether the caption defined using the Clarity> 963 TickerType 948 is shown in the Grid Caption area on the selected Ticker 929 control.

Related properties

 Clarity> 963 TickerType 948

11.1.12.1.58 ShowGridColumnHeaders

Controls hosting this property

Ticker 929			

Type

```
Boolean
```

Values

Value	Description
True	Show Grid Header area.
False	Hide Grid Header area.

Default Value

```
True
```

Remarks

Gets or sets whether the Grid Header area (column headers) are visible on the selected Ticker 929 control.

Related properties

 Clarity> 963 ShowGridCaption 946

11.1.12.1.59 SpacingBetweenElements

Controls hosting this property

Ticker 929			

Type

```
Integer
```

Values

Value	Description
n	Spacing in pixels.

Default Value

```
0
```

Remarks

Gets or sets the spacing in pixels between each ticker element.

Related properties

None

11.1.12.1.60 StoppedColor

Controls hosting this property

AirStatus 882			

Type

```
Colour
```

Default Value

Red

Remarks

Gets or sets the stopped colour for the on-air channel on the connected Clarity 886 system.

Related properties

Clarity> 963 BusyColor 883
Clarity> 963 ReadyColor 885

11.1.12.1.61 TickerControlColor

Controls hosting this property

Ticker 929			

Type

```
Colour
```

Default Value

Control

Remarks

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   994

Copyright © 2000-2006 Pixel Power Ltd.

Gets or sets the background colour of the selected [Ticker](929) control and all controls contained within it.

Related properties

None

11.1.12.1.62 TickerID

Controls hosting this property

[Ticker](929)			

Type

Integer

Values

Value	Description
nnnnnnnn	ID of the current [Ticker](929) control.

Default Value

0

Remarks

Gets or sets the internal ID of the selected [Ticker](929) control.

Related properties

None

11.1.12.1.63 TickerOnScreenCaption

Controls hosting this property

[Ticker](929)			

Type

String

Values

Value	Description
<caption>	Caption text.

Default Value

N/A

Remarks

Gets or sets the caption title to be displayed on an aired page when text of this ticker appears.

Related properties

[Clarity>](963) [TickerType](948)

11.1.12.1.64   TickersRememberWhichRowWasSentLast

Controls hosting this property

TickerController 951			

Type

```
Boolean
```

Values

Value	Description
True	Last sent row is remembered.
False	First usable row will always be played.

Default Value

```
False
```

Remarks

Gets or sets whether instance(s) of the Ticker 929 control controlled by the current TickerController 951 control remember which row was played last. Set to False to enable the first useable row to always be played when Start is pressed.

Related properties

None

11.1.12.1.65   TickerType

Controls hosting this property

Ticker 929			

Type

```
String
```

Values

Value	Description
<caption>	Caption text.

Default Value

N/A

Remarks

Gets or sets the text for the caption shown in the Grid Caption area of the selected Ticker 929 control.

Related properties

 Clarity> 963 ShowGridCaption 946

11.1.12.1.66   TickerTypeFieldNumber

Controls hosting this property

Ticker 929			

Type

Integer

Values

Value	Description
nnnn	Page template field number.

Default Value

0

Remarks

Gets or sets the page template field number that will display the caption defined using the <u>Clarity></u> 963 <u>TickerType</u> 948 .

Related properties

<u>Clarity></u> 963 <u>TickerType</u> 948
<u>Clarity></u> 963 <u>TickerOnScreenCaption</u> 948

11.1.12.1.67   TriggerCharacterForNewLogo

Controls hosting this property

<u>Ticker</u> 929			

Type

Alphanumeric character

Values

Value	Description
Alphanumeric character	Character that will trigger an new logo.

Default Value

N/A

Remarks

Gets or sets the character to send to the connected <u>Clarity</u> 886 system to trigger a new logo for a new ticker category.

Related properties

None

11.1.12.1.68   TriggerLetter

Controls hosting this property

<u>TriggerButton</u> 960			

Type

Alphanumeric character

Values

997   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Value	Description
`<trigger>`	Trigger character.

Default Value

N/A

Remarks

Gets or sets the character to send to the connected Clarity [886] system that will trigger animations on pages currently aired.

Related properties

_Clarity> [963] ChannelNumber [883]

11.1.12.1.69   UpdateDelay

Controls hosting this property

TextBoxToGlobalField [926]		

Type

`Integer`

Values

Value	Description
`nnnnnnnnn`	Time delay in milliseconds.

Default Value

`0`

Remarks

Gets or sets the interval to wait in milliseconds, after input has ceased, before updating the global field (whilst focus is still within the control).

Related properties

None

11.1.12.1.70   UseOwnController

Controls hosting this property

Ticker [929]		

Type

`Boolean`

Values

Value	Description
`True`	Use own internal controller.
`False`	Use an instance of a TickerController [951] control in the current project.

Default Value

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   998

Copyright © 2000-2006 Pixel Power Ltd.

```
True
```

Remarks

Gets or sets whether the current [Ticker] 929 control uses its own internal controller (shown at the top of the control) OR an instance of a [TickerController] 951 control in the current project. An instance of the [TickerController] 951 control can be specified using the [Clarity>] 963 [ControllerID] 933 property.

Related properties

[Clarity>] 963 [ControllerID] 933

11.1.12.1.71 UseThisTickerCaption

Controls hosting this property

[Ticker] 929			

Type

```
String
```

Values

Value	Description
`<label>`	Check box label.

Default Value

```
Use This Ticker
```

Remarks

Gets or sets the label for the check box used to determine whether the controller on the current [Ticker] 929 control is to be used.

Related properties

[Clarity>] 963 [UseThisTickerCheckBoxPresent] 951

11.1.12.1.72 UseThisTickerCheckBoxPresent

Controls hosting this property

[Ticker] 929			

Type

```
Boolean
```

Values

Value	Description
`True`	Display check box and caption.
`False`	Hide check box and caption.

Default Value

```
True
```

Remarks

Gets or sets whether the current [Ticker] 929 control displays the check box and caption, enabling the user to determine whether the current [Ticker] 929 control is to be used.

Related properties

_Clarity> |963| UseThisTickerCaption |950|

11.1.12.1.73   XmlDataFile

Controls hosting this property

DropDownListToFields |903|	DropDownListToGlobalFields |908|		

Type

```
String
```

Values

Value	Description
<path>	UNC or local path and XML filename.

Default Value

N/A

Remarks

Sets the source of XML data for the selected drop-down list box.

Related properties

None

SEE ALSO

XML Table Creator |858|
Tools> |863| XML Table Creator |864|

11.1.12.2   Accessibility

The following properties are available for configuration where applicable.

Name	Description
AccessibleDescription	Description that will be reported to accessibility clients.
AccessibleName	Name that will be reported to accessibility clients.
AccessibleRole	Role that will be reported to accessibility clients.

11.1.12.3   Appearance

The following properties are available for configuration where applicable.

Name	Description
BackColor	Defines the background colour of the selected form or control.
BackgroundImage	Defines the background image of the selected form or control.
BackgroundImageLayout	Defines how the specified background image is displayed for the selected form or control.
BorderStyle	Defines that the selected control has a visible border.

Name	Description
Cursor	Defines the cursor that appears when the mouse pointer is passed over the selected control.
FlatAppearance	Defines the appearance of the border and the colour used to indicate the check state and mouse state of the selected control if the FlatStyle property is set to Flat.
FlatStyle	Defines the appearance of the control when the mouse pointer is moved over it.
Font	Defines the font and associated font attributed for the selected form or control.
ForeColor	Defines the foreground colour of the selected form or control.
Lines	Defines the lines of text as an array of string values for the selected multi-line control.
Image	Defines the foreground image of the selected control.
ImageAlign	Defines the alignment of the foreground image for the selected control.
ImageIndex	N/A
ImageKey	N/A
ImageList	N/A
RightToLeft	Defines whether the selected form or control should draw right-to-left for right-to-left languages.
RightToLeftLayout	Defines whether the layout controls of the selected form is set to right-to-left.
ScrollBars	Defines which scroll bars will be used by the selected control if applicable.
Text	Defines the display text associated with the selected form or control.
TextAlign	Defines the alignment of text on the selected control.
TextImageRelation	Defines the relative location of the image to the text on the selected control.
UseMnemonic	Defines that the first character preceded by an ampersand (&) for the selected control will be used as the controls' mnemonic key.
UseVisualStyleBackColor	Defines whether the selected control is drawn using visual styles if they are supported. Microsoft .NET Framework provides support for rendering controls and other Windows user interface (UI) elements using visual styles in operating systems that support them
UseWaitCursor	Defines whether the Cursor property is set to WaitCursor.

11.1.12.4 Behavior

The following properties are available for configuration where applicable.

Name	Description
AcceptsReturn	Defines if Return characters are accepted as input for the selected multi-line edit control.
AcceptsTab	Defines if Tab characters are accepted as input for the selected multi-line edit control.
Alignment	Defines whether the tabs on the selected control appear on the top, bottom, left or right side of the Control (left or right are implicitly multi-lined).
AllowDrop	Defines whether the selected control can accept data that the user drags onto it.
AutoEllipsis	Define whether the selected control automatically handles text that extends beyond the width of the control.

Name	Description
AutoValidate	Defines whether selected controls in the container will be automatically validated when the focus changes.
CharacterCasing	Defines whether characters in the selected control should be converted to uppercase or lowercase.
ContextMenuStrip	Defines the shortcut menu to display for the selected control when the user right-clicks.
DialogResult	Defines the dialog box result produced in a model form by clicking the selected control.
DrawMode	Defines whether the selected control is drawn using the application code or the operating system.
DropDownHeight	Defines the height of the selected control in pixels.
DropDownWidth	Defines the width of the selected control in pixels.
DoubleBuffered	Defines whether the current form will be double buffered.
Enabled	Defines whether the control is enabled.
HotTrack	Defines whether tabs in the selected control visually change when the mouse passes over them.
HideSelection	Defines whether the selected control is hidden when it loses focus.
ImeMode	Defines the IME (Input Method Editor) status of the control when selected.
IntegralHeight	Defines whether the selected control should resize dynamically to avoid showing partial items.
ItemHeight	Defines the height in pixels of items contained in the selected control.
ItemSize	Defines the fixed width of owner drawn tabs and the height of all tabs.
MaxDropDownItems	Defines the maximum number of drop-down items that can be listed by the selected control.
MaxLength	Defines the maximum number of characters that can be entered into the selected control.
Multiline	Defines whether the text in the selected control can span more than one line.
Padding	Defines how much extra space should be added text/images for the selected tab on the selected control.
PasswordChar	Defines the character to display for password input for the selected single line control.
ReadOnly	Defines whether the text in the selected control can be changed.
ShortcutsEnabled	Defines whether shortcuts specified for the selected control are enabled.
ShowToolTips	Defines whether tooltips should be shown for tabs on the selected control that have the Misc> [1004]ToolTipText property configured.
SizeMode	Defines how tabs are sized in the selected control.
Sorted	Defines whether items in the drop-down list portion of the selected control are sorted.
TabIndex	Defines the index in the Tab order that the select control will occupy.
TabPages	Defines the available tabs in the selected control. Displays the TabPage Collection Editor dialog box [869].
TabStop	Defines whether the selected control can be given focus by the Tab key.
UseCompatibleTextRendering	Defines whether text rendering for the selected control should be compatible with previous releases of Microsoft Windows forms.

Name	Description
UseSystemPasswordChar	Defines that the text in the selected control should appear as the default password character.
Visible	Defines whether the selected control is visible or hidden.
WordWrap	Defines whether lines are automatically word wrapped in the selected control.

11.1.12.5 Data

The following properties are available for configuration where applicable.

Name	Description
(DataBindings)	N/A
DataSource	N/A
DisplayMember	N/A
Items	N/A
Tag	N/A
ValueMember	N/A

11.1.12.6 Design

The following properties are available for configuration where applicable.

Name	Description
(Name)	Defines the name of the selected form or control that the Clarity Control Toolbox software will use internally.
DrawGrid	Defines whether or not to draw the positioning grid on the selected form or control.
GenerateMember	Defines whether a member variable will be created for the selected form or control.
GridSize	Defines the size of the positioning grid for the selected form or control.
Locked	Defines whether the selected form or control is locked, meaning it cannot be resized or re-positioned.
Modifiers	Defines the visibility level of the object.
SnapToGrid	Defines whether the selected control should snap to the positioning grid.

11.1.12.7 Focus

The following properties are available for configuration where applicable.

Name	Description
CausesValidation	Defines whether the selected control raises validation events.

11.1.12.8   Layout

The following properties are available for configuration where applicable.

Name	Description
Anchor	Defines the edge of the container to which the selected control is bound. When a control is anchored to an edge, the distance between the control's closest edge and the specified edge will remain constant.
AutoScaleMode	Defines how the form or control will scale when the screen resolution or font changes.
AutoScroll	Indicates whether scroll bars automatically appear when the selected controls' contents are larger than its visible area.
AutoScrollMargin	Defines the margin around the selected control during auto-scrolling.
AutoScrollMinSize	Defines the minimum logical size for the auto-scroll region.
AutoSize	Defines whether the selected control will automatically size itself to fit its contents.
AutoSizeMode	Defines the mode by which the user interface element automatically resizes itself.
Dock	Defines which borders of the selected control are bound to the container.
Location	Defines the co-ordinates of the upper left corner of the selected control relative to the upper left of its container.
Margin	Defines the space between the selected control and another controls' margin.
MaximumSize	Defines the maximum size of the selected form or control in pixels.
MinimumSize	Defines the minimum size of the selected form or control in pixels.
Padding	Defines the interior spacing of the selected form or control in pixels.
Size	Defines the size of the selected form or control in pixels.
StartPosition	Defines the position of the selected form when it first appears.
WindowState	Defines the initial visual state of the selected form e.g. Maximised or Minimised.

11.1.12.9   Misc

The following properties are available for configuration where applicable.

Name	Description
AcceptButton	Defines that the selected form will feature an "Accept" button. With this property set, the button is selected whenever the user presses Enter.
AutoCompleteCustomSource	Defines the StringCollection to use when the AutoCompleteSource property is set to CustomSource.
AutoCompleteMode	Defines the text completion behaviour of the selected control.
AutoCompleteSource	Defines the autocomplete source, which can be one of the values supplied from the AutoCompleteSource enumeration.
CancelButton	Defines that the selected form will feature a "Cancel" button. With this property set, the button is selected whenever the user presses Esc.
FormatString	Defines the format specifier characters that indicate how a value is to be displayed. See the Format String dialog box [866].

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1004

Copyright © 2000-2006 Pixel Power Ltd.

Name	Description
FormattingEnabled	Defines whether the value of FormatString is used to covert the value of <u>Data></u> |1003| DisplayMember into a value that can be displayed.
ImageIndex	Identifies the image displayed on the tab. Only applies to the <u>TabControl</u> |920| control.
ImageKey	Identifies the image displayed on the tab. Only applies to the <u>TabControl</u> |920| control.
KeyPreview	Defines whether keyboard events for controls on the selected form are registered with the form.
ToolTipText	Defines the text shown when the mouse pointer hovers over the tab. Only applies to the <u>TabControl</u> |920| control.

11.1.12.10   Window Style

The following properties are available for configuration for the selected form. They are NOT available for any available controls.

Name	Description
ControlBox	Defines whether the selected form features a control/system menu box.
HelpButton	Defines whether the selected form features a Help button in the top-right hand side of the title bar.
Icon	Defines the icon for the selected form that is displayed in the forms' system menu box and when the form is minimised.
IsMdiContainer	Defines whether the selected form is an MDI container.
MainMenuStrip	Specifies the primary MenuStrip for the selected form. This property is used for keyboard activation and automatic merging in MDI.
MaximizeBox	Defines whether the selected form features a Maximize box in the top right-hand corner of the title bar.
MinimizeBox	Defines whether the selected form features a Minimize box in the top right-hand corner of the title bar.
Opacity	Defines the opacity of the selected form.
ShowIcon	Defines whether an icon is displayed in the title bar of the selected form.
ShowInTaskBar	Defines whether the selected form (built application) is shown in the Windows Taskbar.
SizeGripStyle	Defines the style of the size grip to display in the lower-right corner of the form.
TopMost	Defines that the selected form always appears above all other forms that do not have this property configured.
TransparencyKey	Defines a colour that will appear transparent when painted on a form.

11.1.13 Featured XML files, basic description and tag reference (where relevant)

This section describes application files created after saving and building a project and provides an XML tag reference where relevant:

XML file	Tag reference	Description
<application name>.config 1006	<application name>.config tag reference 1006	Stores configuration information for an application (.EXE) with the same filename.

11.1.13.1 <application name>.config

The example shown below in NO way shows all available settings and is included in this documentation to show the format and the way in which settings are structured.

Stores configuration information for an application (.EXE) with the same filename. Basically, any control that references an external file or folder is listed. The names of controls and properties featured in this example file use the default names and may be different to those stored in your own file.

```
<configuration version="1.0">
    <loadJobButton1>
        <add key="JobName" value="C:\ClarityControlToolbox\Test\Test.ppj" />
    </loadJobButton1>
    <dropDownListToFields1>
        <add key="XmlDataFile" value="C:\ClarityControlToolbox\Test\Test_Data.xml" />
    </dropDownListToFields1>
    <clarity1>
        <add key="HostName" value="localhost" />
        <add key="AutoReconnectInterval" value="5000" />
        <add key="PortNumber" value="10220" />
        <add key="FeedbackPortNumber" value="10221" />
        <add key="AutoReconnect" value="False" />
    </clarity1>
    <logging1>
        <add key="LogFileDirectory" value="C:\ClarityControlToolbox\Test" />
    </logging1>
</configuration>
```

11.1.13.1.1 <application name>.config tag reference

The `<application name>.config` file should ALWAYS have a `<configuration>` base tag.

Tag (default control naming shown)			Parameters	Description
configuration				Contains attributes that influence the application (.EXE) with the same name.
	loadJobButton1			Instance of the LoadJobButton 913 control.
		JobName	<path>	JobName 914 File path of the job to be loaded by the application.
	dropDownListToFields1			Instance of the DropDownListToFields 903 control.
		XmlDataFile	<path>	XmlDataFile 905 File path linking the source of XML data for the drop-down list box.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1006

Copyright © 2000-2006 Pixel Power Ltd.

Tag (default control naming shown)		Parameters	Description
clarity1			Instance of the Clarity [886] control.
	HostName	<DNS name>	HostName [890] Clarity DNS hostname.
	AutoReconnectInterval	<delay>	AutoReconnectInterval [887] Time elapsed until automatic reconnection is initiated with the Clarity XML Socket Server.
	PortNumber	<port>	PortNumber [890] Port number on the connected Clarity [886] system.
	FeedbackPortNumber	<port>	FeedbackPortNumber [889] Feedback port number on the connected Clarity [886] system.
	AutoReconnect		AutoReconnect [887] If the Clarity XML Socket Server on the connected Clarity system loses connection with an application built using the Clarity Control Toolbox, this property enables reconnection.
		True	Automatically reconnect.
		False	Do not reconnect automatically.
logging1			Instance of the Logging [915] control.
	LogFileDirectory	<path>	LogFileDirectory [918] Log file directory and log file.

11.2   Clarity COM

Clarity COM is a Microsoft compatible COM object giving the ability to update data and control a Clarity system unit using the Clarity XML protocol. The Clarity COM object is featured as part of the CG Tools software. It may be required that you update this installed version. See Installing the Clarity COM software [1008] for more information.

After installation, the following resources are available.

Variable	Value
Executable	`ClarityCOM15.exe`
	`ClarityCOM15.tlb`
Default Path	`C:\Program Files\Pixel Power Ltd\Bin`

SEE ALSO

11.2.1   Applicable software version

This documentation applies to the following version of software:

Clarity COM, Version 1.5.2.3

11.2.2   Installing the Clarity COM software using a full install

To install the Clarity COM software using a full install, follow the steps below. If you have received a patch on CD-ROM or via email, follow the relevant instructions that accompany the patch.

1.   Insert the installation media supplied to you and run the SETUP.EXE program located at the root of the media (e. g. CD-ROM). The installation starts.
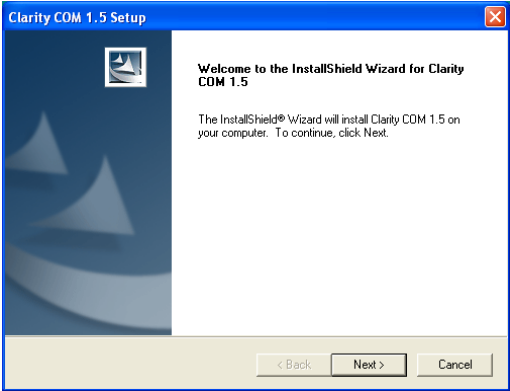
2.   Select Next to start the Clarity COM installation.
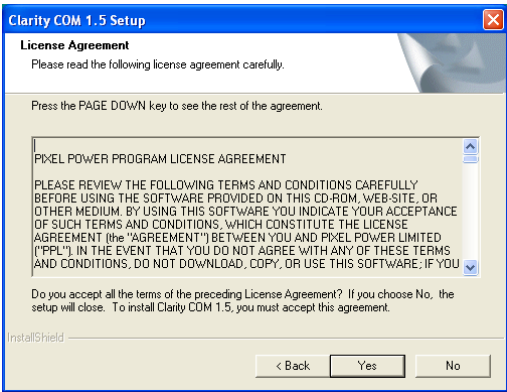
3. Read the licence information, then select Yes to accept the licence agreement.
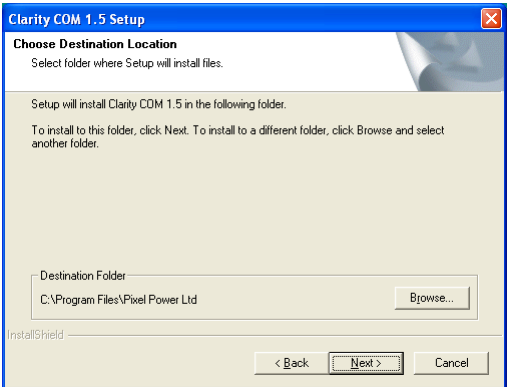
4. Select Next to accept the default installation path or select Browse to navigate to a location where you want to install the software. Select Next.

    The software is installed.
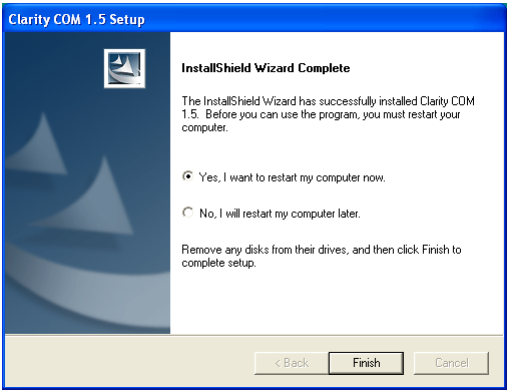
5. Select whether you want to re-start the current machine and then select Finish to complete the installation.

NOTE

To ensure that installation is completed correctly, you must re-start the current machine.

11.3 Clarity XML Socket Server

The Clarity XML Socket Server application parses Clarity XML protocol commands via a TCP/IP socket between the CG Tools software and any software (either Pixel Power or third party) that wants to communicate with the CG Tools software using the Clarity XML protocol.

The `Socket Server App.exe` application is installed as part of the CG Tools software installation.

After installation, the following resources are available.

Variable	Value
Executable	`Socket Server App.exe`
Path	`C:\Program Files\Pixel Power Ltd\Bin`
Shortcut	`C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd` `\XML Socket Server`

SEE ALSO

Applicable software version ⌐1010⌐
Overview ⌐1010⌐

11.3.1 Applicable software version

This documentation applies to the following version of software:

Clarity XML Socket Server, Version 1.6.0.7

11.3.2 Overview

The follow sections are featured in the documentation:

Section	Description
Starting the Clarity XML Socket Server ⌐1010⌐	Explains how to start the Clarity XML Socket Server application.
Description of the Clarity XML Socket Server GUI ⌐1012⌐	Describes the GUI components available on the Clarity XML Socket Server application.
Dialog boxes ⌐1015⌐	Documents the functionality offered by available dialog boxes.
Clarity XML Socket Server GUI shortcut command line switches ⌐1022⌐	Describes the full complement of available switches and their parameters.
System Tray icon states ⌐1023⌐	Describes System Tray icon states.
System Tray shortcut menu commands ⌐1023⌐	Explains the commands available in the shortcut menu which can be displayed by right-clicking on the System Tray icon.
Clarity XML Socket Server application logs ⌐1024⌐	Describes application and communication logging.

11.3.3 Starting the Clarity XML Socket Server

To start the Clarity XML Socket Server, follow the steps below:

1. Select Start>All Programs>Pixel Power Ltd>XML Socket Server. The Clarity XML Socket Server application is started.

    If the `-AUTOCONNECT` command line switch has been added to the Clarity XML Socket Server GUI shortcut command line ⌐1022⌐, then the XML Socket Server application is displayed and a connection is initiated.
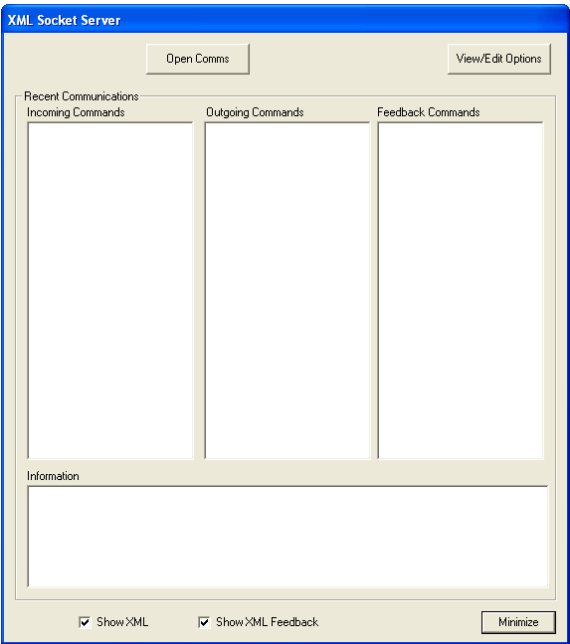
If the –AUTOCONNECT command line switch has NOT been added, the About Socket Server dialog box is displayed.
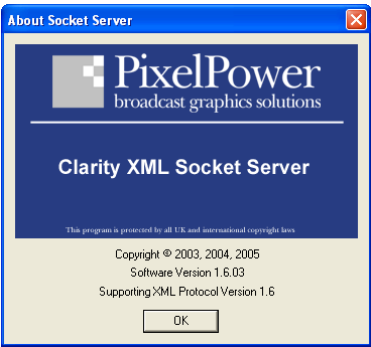
Select OK to close the About Socket Server dialog box and subsequently display the XML Socket Server application.

If a connection has not been initiated automatically using the relevant command line switches [1022], you can configure connection settings and then connect manually. At any time, you can click on the Minimize button [1012]. The application will be subsequently minimized and will appear in the System Tray [1023]. You can optionally start the Clarity XML Socket Server application automatically [1011] if desired using the Windows Startup program group.

SEE ALSO

Description of the Clarity XML Socket Server GUI [1012]

11.3.3.1   Ensuring the Clarity XML Socket Server is started automatically (OPTIONAL)

To optionally ensure that the Clarity XML Socket Server is started automatically when the current system started, follow the steps below:

By default, the XML Socket Server shortcut is placed in the following program group:

```
C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd.
```

Note that this is the default installation location and this may be different to the CG Tools installation on your system.

1. Select Start>All Programs>Pixel Power Ltd.
2. Right-click on the XML Socket Server shortcut.
3. Select Copy from the shortcut menu that appears.
4. Select Start>All Programs>Startup.
5. Right-click and select Paste from the shortcut menu that appears.

NOTE

To initiate a connection automatically, the $-$AUTOCONNECT command line switch must be added to the Clarity XML Socket Server GUI shortcut command line [1022].

11.3.4 Description of the Clarity XML Socket Server GUI

This section describes the GUI components available on the Clarity XML Socket Server application.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
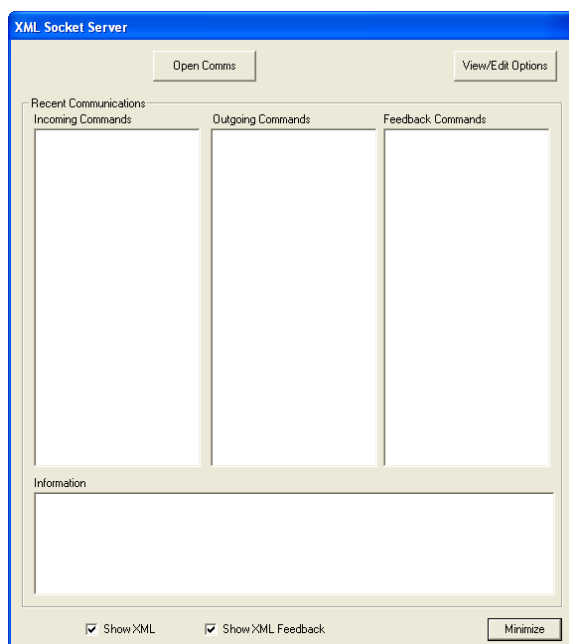
11.3.4.1 Minimize button

At any time, you can select the Minimize button. The application will be subsequently minimized. Access to the minimized application is achieved using the icon in the System Tray [1023]. A shortcut menu [1023] can be displayed by right-clicking on the icon.

11.3.4.2 Open Comms button

Select the Open Comms button to connect to the CG Tools software on the designated machine as specified in the Machine group box [1016] on the Socket Server Options dialog box [1016]. You should see the installed version of the CG Tools software start in the background on the designated machine if it has not already started.

In normal circumstances, this will be the local machine (localhost). If you are connecting for the first time since the Clarity XML Socket Server software was installed, the following message will be displayed if you have the Microsoft Windows firewall turned on, asking whether you want to keep blocking the application. Select Unblock to stop blocking the application, enabling subsequent unimpeded access.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1012

Copyright © 2000-2006 Pixel Power Ltd.

After the CG Tools software has been started, messages similar to the following should appear in the Information text box $\boxed{1014}$.

```
Socket Server App 1.6.06 supporting XML protocol version 1.6
About to attempt connection to Clarity localhost
Connection succeeded
About to start command listen socket
Command socket create succeeded on default IP address, port 10220
Command listen socket listen succeeded
About to start feedback listen socket
Feedback socket create succeeded on default IP address, port 10221
Feedback listen socket listen succeeded
```

To stop communication with the CG Tools software on the designated machine, select the Open Comms button again. Messages similar to the following should appear in the Information text box $\boxed{1014}$.

```
About to stop command listen socket
About to close any connected sockets
About to stop feedback listen socket thread
Stop connection to Clarity
```

NOTE

If application logging is turned on using the controls in the Log File Options group box $\boxed{1018}$ in the Connection group box $\boxed{1016}$ on the Socket Server Options dialog box $\boxed{1016}$, messages will also be recorded in the Application message log $\boxed{1024}$.

11.3.4.3   Recent Communications group box

This group box features list boxes that display incoming $\boxed{1013}$, outgoing $\boxed{1014}$ and feedback $\boxed{1014}$ communications once a connection has been initiated. It also displays general information about the state of the connection(s) $\boxed{1014}$. To remove commands from a list box that have built up over a period of time, double-click on a command to clear the entire list.

11.3.4.3.1   Incoming Commands list box
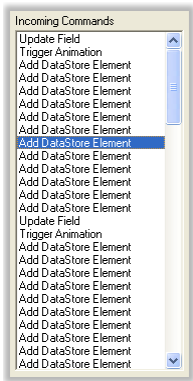
Displays commands being received by the Clarity XML Socket Server that are being sent by a controlling application e.g. a custom application created using the Clarity Control Toolbox software.

The commands listed relate directly to those commands made available by the supported Clarity XML Protocol that are being used by the controlling application.

If a command is selected, the corresponding outgoing command that is sent to the CG Tools software is selected automatically in the Outgoing Commands list box $\boxed{1014}$.

11.3.4.3.2   Outgoing Commands list box
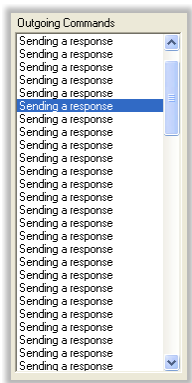
Displays commands being sent by the Clarity XML Socket Server to the connected CG Tools software application on the designated machine.

Normally you should only experience the following command being shown after an incoming command that demands a response has been received.

```
Sending a response
```

11.3.4.3.3   Feedback Commands list box
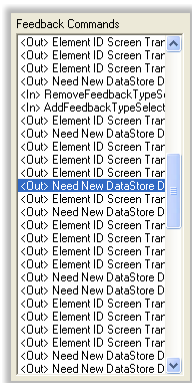
Displays feedback information received by the Clarity XML Socket Server from the connected CG Tools software application on the designated machine.

Feedback commands are always returned by the CG Tools software; they are only displayed if the Use Feedback box is checked in the Connection group box 1016 on the Socket Server Options dialog box 1016.

By default, feedback commands are monitored on port 10221. Feedback commands are prefixed with either the <In> or <Out> tag.

11.3.4.3.4   Information text box

Displays activity messages relating to socket connections between the Clarity XML Socket Server and the connected copy of the CG Tools software running on the designated machine specified using the control in the Machine group box 1016 on the Socket Server Options dialog box 1016.

Messages shown here are also logged in the Clarity XML Socket Server application logs, if application logging is turned on using the controls in the Log File Options group box 1016 on the Socket Server Options dialog box 1016.

The maximum number of socket connections to enable the monitoring of command and feedback events is configured using the respective Max Connections text boxes in the Connections group box 1016 on the Socket Server Options dialog box 1016.
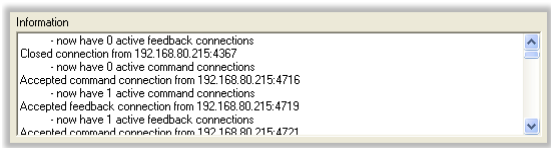
SEE ALSO

Clarity XML Socket Server application logs 1024

11.3.4.4 Show XML check box

Check the Show XML box to display an extensible XML breakdown of the selected incoming/outgoing command in the Recent Communications group box |1013|. Should be displayed and used for debugging purposes. The Show XML Commands dialog box |1019| is displayed.

11.3.4.5 Show XML Feedback check box

Check the Show XML Feedback box to display an extensible XML breakdown of the selected feedback command in the Feedback Commands list box |1014| in the Recent Communications group box |1013|. Should be displayed and used for debugging purposes. The Show XML Feedback dialog box |1019| is displayed.

11.3.4.6 View/Edit Options button

Only enabled when no connection is currently active.

Select the View/Edit Options button to display the Socket Server Options dialog box |1016| where you can configure connection |1016|, logging |1018|, machine |1018| and encoding |1018| settings.

11.3.5 Dialog boxes

New or edited dialog boxes since the last release are highlighted with dark grey shading.

Name	Description
About Socket Server dialog box |1015|	Displays version information.
Socket Server Options dialog box |1016|	Enables the configuration of Clarity XML Socket Server application connection |1016|, logging |1018|, machine |1018| and encoding |1018| settings.
Show XML commands dialog box |1019|	Displays a breakdown of the selected incoming and outgoing command in the respective Incoming Commands |1013| and Outgoing Commands listed boxes |1014| in the Recent Communications group box |1013| on. Should be displayed and used for debugging purposes.
Show XML Feedback dialog box |1021|	Displays a breakdown of the selected feedback command in the Feedback Commands list box |1014| in Recent Communications group box |1013|. Should be displayed and used for debugging purposes.

11.3.5.1 About Socket Server dialog box

Displays information regarding the Clarity XML Socket Server software version and the version of the Clarity XML Protocol language supported by the Clarity XML Socket Server. This dialog box is displayed when the Clarity XML Socket Server is first started and on demand using the About command in the System Tray shortcut |1023| command.

1015   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.
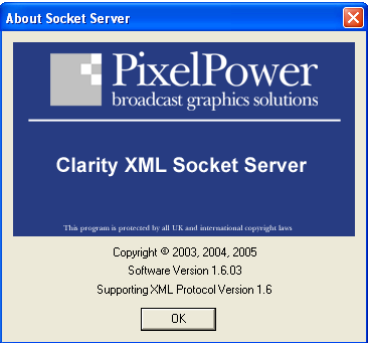
11.3.5.2   Socket Server Options dialog box

Enables the configuration of Clarity XML Socket Server application connection |1016|, logging |1018|, machine |1018| and encoding |1018| settings. To display the Socket Server Options dialog box, follow the step below:

1.   Select the View/Edit Options button |1015| on the Clarity XML Socket Server GUI |1012|. The Socket Server Options dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
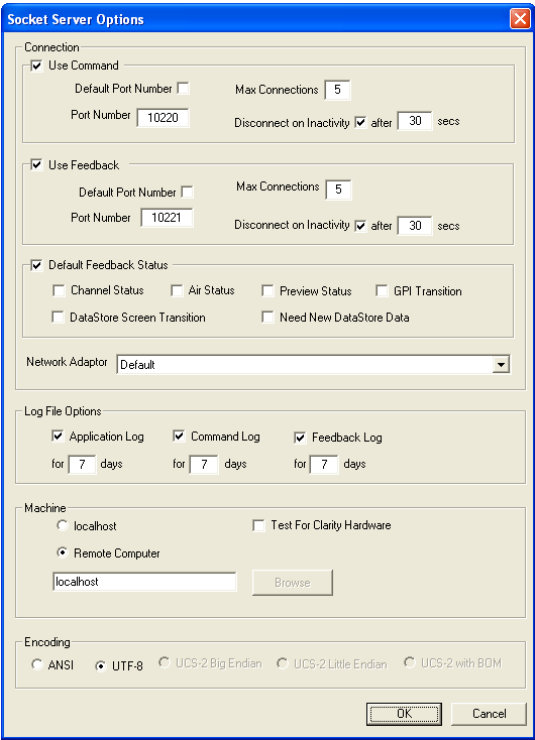
11.3.5.2.1   Connection group box

The controls in the Connection group box enable the configuration of connection settings.

Use Command group box

Check the Use Command check box to enable the controls in the group box.

Option	Default	Description
Default Port number check box	Checked	To enable the use of the default port for the transmission of command events, check this box.
Port Number text box	10220	If the Default Port number check box is cleared, enter a new port number in this text box.
Max Connections text box	5	To specify the maximum number of socket connections on the defined port number, edit the value in this text box.

Option	Default	Description
Disconnect on Inactivity check box and text box	30 secs	The Clarity XML Protocol requires that a Heartbeat command is periodically sent to the Clarity system in order to maintain the Command connection. If this checkbox is checked (which it is by default), the Clarity XML Socket Server will terminate any connection for which it has not received a Heartbeat command in the specified timeout period. The default specified timeout period is 30 seconds. This is the suggested default and certainly the most appropriate for any application which uses ClarityCOM to connect to the Clarity XML Socket Server, which by default, automatically sends out Heartbeat commands every 20 seconds.

Use Feedback group box

Check the Use Feedback check box to enable the controls in the group box.

Option	Default	Description
Default Port number check box	Checked	To enable the use of the default port for the monitoring of feedback events, check this box. The default port is always one greater than the current command socket.
Port Number text box	10221	If the Default Port number check box is cleared, enter a new port number in this text box.
Max Connections text box	5	To specify the maximum number of socket connections on the defined port number, edit the value in this text box.
Disconnect on Inactivity check box and text box	30 secs	The Clarity XML Protocol requires that a Heartbeat command is periodically sent to the Clarity system in order to maintain the Feedback connection. If this checkbox is checked (which it is by default), the Clarity XML Socket Server will terminate any connection for which it has not received a Heartbeat command in the specified timeout period. The default specified timeout period is 30 seconds. This is the suggested default and certainly the most appropriate for any application which uses ClarityCOM to connect to the Clarity XML Socket Server, which by default, automatically sends out Heartbeat commands every 20 seconds.

Default Feedback Status group box

Check the Default Feedback Status check box to enable the controls in the group box.

Generally the required feedback selection for the Clarity XML Socket Server should be set up programmatically using the `AddFeedbackTypeSelection` command. In this way, the required selection may be set up on a per connection and per Clarity output channel basis. If you do not wish to operate in this manner then certain specific feedback selection types may be configured. If this is done, then the selections will apply to all Clarity output channels and for every feedback connection into the socket server. It should be noted that Pixel Power recommend that this is NOT used apart for testing purposes.

Option	Description
Channel Status check box	Check this box to receive feedback commands relating to the status of a channel on the connected system unit.
Air Status check box	Check this box to receive feedback commands relating to the status of the page currently being aired.
Preview Status check box	Check this box to receive feedback commands relating to the status of the page currently being previewed.
GPI Transition check box	Check this box to receive feedback commands showing when GPI transitions occur.
DataStore Screen Transition check box	Check this box to receive feedback commands when a continuous ticker moves on or off the screen. This will only be active when the continuous ticker is fed from a Data Store
Need New DataStore Data check box	Check this box to receive feedback commands when a continuous ticker requires new data to be sent. This will only be active when the continuous ticker is fed from a Data Store

Network Adaptor drop-down list box

Enables the selection of a specific network adaptor that the Clarity XML Socket Server will communicate with on the machine selected using the controls in the <u>Machine group box</u> [1018]. Select Default to enable unrestricted access to the Clarity XML Socket Server by any machine that wishes to connected to it. Alternatively, you can select `LocalHost` (which is referenced by the default IP address of `127.0.0.1`). This ensures that only the local machine (`LocalHost`) can communicate with the Clarity XML Socket Server. You can also select a specific network adapter. Selecting a specific network adaptor ensures that only the machine using that adapter can communicate with the Clarity XML Socket Server.

11.3.5.2.2 Encoding group box

Enables the configuration of how the Clarity XML Socket Server interprets incoming data from remote applications that is formatted using different character encoding schemes. UTF-8 is the default and is the standard Unicode encoding scheme. ANSI is more historical and the Clarity XML Socket Server will use the default code page of the machine on which it is running.

Option	Default	Description
ANSI		Select this option if data is formatted using the ANSI code page.
UTF-8 (default)	Selected	Select this option if data is formatted using the UTF-8 code page. UTF-8 (8-bit Unicode Transformation Format) is a variable-length character encoding for Unicode. It is able to represent any universal character in the Unicode standard, yet is backwards compatible with ASCII.
UCS-2 Big Endian	N/A	Not available at this time.
UCS-2 Little Endian	N/A	Not available at this time.
UCS-2 with BOM	N/A	Not available at this time.

11.3.5.2.3 Log File Options group box

Enables the selection of which log files are created by the Clarity XML Socket Server. See <u>Clarity XML Socket Server application logs</u> [1024] for more information.

Option	Default	Description
Application Log check box and text box	Checked `7 days`	Check this box to ensure that application events are subsequently logged. To define how long application logs are kept on the local system, enter a value in the text box below.
Command Log check box and text box	Checked `7 days`	Check this box to ensure that command events are subsequently logged. To define how long command logs are kept on the local system, enter a value in the text box below.
Feedback Log check box and text box	Checked `7 days`	Check this box to ensure that feedback events are subsequently logged. To define how long feedback logs are kept on the local system, enter a value in the text box below.

11.3.5.2.4 Machine group box

Enables the selection of the machine or system unit hosting a copy of the CG Tools software that the Clarity XML Socket Server will connect to when the Open Comms button is selected or when the application is start automatically if the `AutoConnect` [1022] command line switch is defined.

Option	Default	Description
localhost radio button	Selected	To specify that the Clarity XML Socket Server will connect to the local machine, ensure that this option selected.
Remote Computer radio button, text box and Browse button		To specify a specific machine or Clarity system unit to connect to, select this option and the enter the DNS name or IP address of the machine that you want to connect to in the text box. Use the Browse button to browse the local area network for a machine using normal Windows methods.

Option	Default	Description
Test For Clarity Hardware check box		To ensure that the Clarity XML Socket Server checks for Clarity hardware on the localhost or machine specified using the Remote Computer text box, check this box. When this box is checked, if the machine does not feature Clarity hardware, a connection will not be initiated.

11.3.5.3   Show XML Commands dialog box

Displays a breakdown of the incoming and outgoing command, selected in the respective Incoming Commands [1013] and Outgoing Commands list boxes [1013] in the Recent Communications group box [1013]. Should be displayed and used for debugging purposes. To display the Show XML Commands dialog box, follow the step below:

1.   Check the Show XML box [1015] on the Clarity XML Socket Server GUI [1012]. The Show XML Commands dialog box is displayed.

To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).
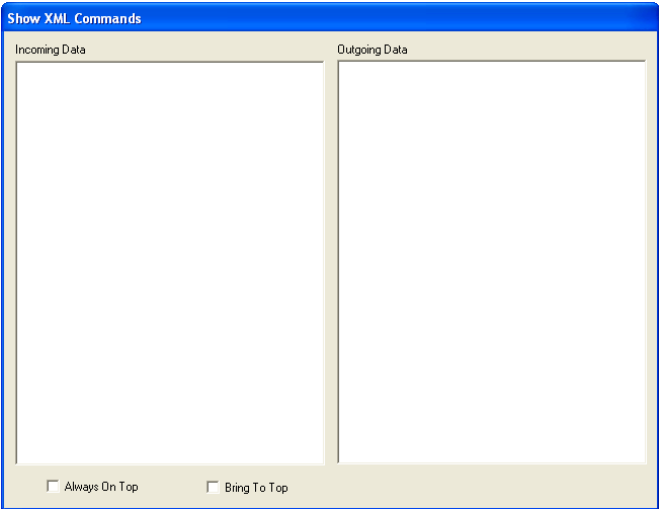
NOTE

If command logging is turned on using the controls in the Log File Options group box [1018] in the Connection group box [1016] on the Socket Server Options dialog box [1016], commands will also be recorded in the Command [1024] logs.

11.3.5.3.1   Always On Top check box

Check the Always On Top box to ensure that the Show XML Commands dialog box is always top most in the current list of windows.

11.3.5.3.2   Bring To Top check box

Check the Bring To Top box to bring the Show XML Commands dialog box to the top of the current list of windows when a new command is received.

11.3.5.3.3 Incoming Data list box

Displays a breakdown of the selected command in the Incoming Commands list box [1013] in the Recent Communications group box [1013]. The command is shown in a treeview representing the extensible XML within the command. An example is shown below:
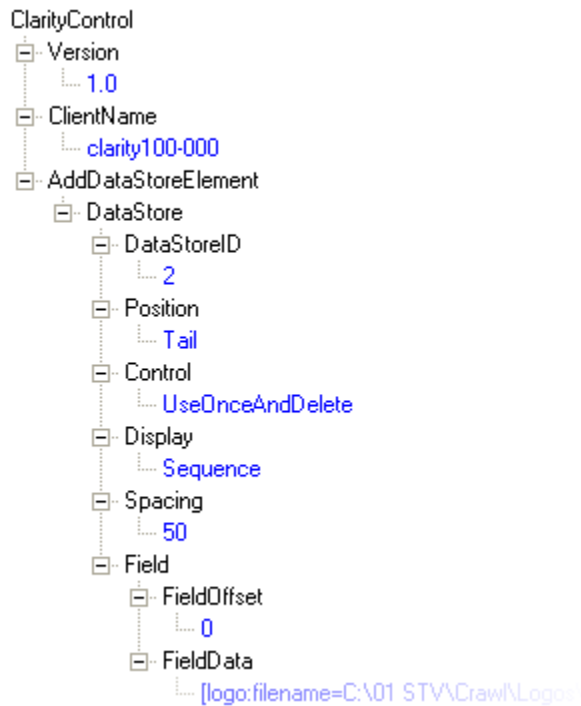
11.3.5.3.4 Outgoing Data list box

Displays a breakdown of the selected command in the Outgoing Commands list box [1014] in the Recent Communications group box [1013]. The command is shown in a treeview representing the extensible XML within the command response. An example is shown below:
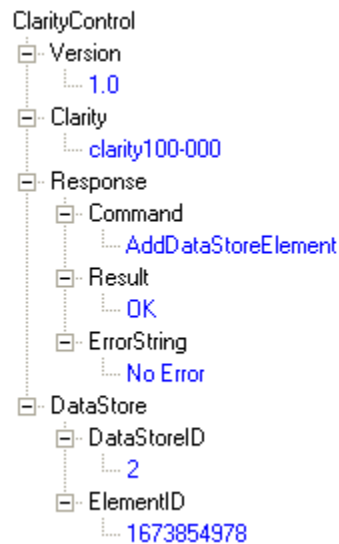
11.3.5.4 Show XML Feedback dialog box

Displays a breakdown of the selected feedback command in the <u>Feedback Commands list box</u> 1014 in the <u>Recent Communications group box</u> 1013. Should be displayed and used for debugging purposes. To display the Show XML Feedback dialog box, follow the step below:

1. Check the <u>Show XML Feedback box</u> 1015 on the <u>Clarity XML Socket Server GUI</u> 1012. The Show XML Feedback dialog box is displayed.

   To learn more on the functions of this dialog box, dialog tab or control box, click on an area of interest (online documentation only).

NOTE

If feedback logging is turned on using the controls in the <u>Log File Options group box</u> 1018 in the <u>Connection group box</u> 1016 on the <u>Socket Server Options dialog box</u> 1016, commands will also be recorded in the <u>Feedback</u> 1024 logs.

11.3.5.4.1 Always On Top check box

Check the Always On Top box to ensure that the Show XML Feedback dialog box is always top most in the current list of windows.

11.3.5.4.2 Bring To Top check box

Check the Bring To Top box to bring the Show XML Feedback dialog box to the top of the current list of windows when a new command is received.

11.3.5.4.3   Feedback Data list box

Displays a breakdown of the selected feedback command in the Feedback Commands list box [1014] in the Recent Communications group box [1013]. The feedback command is shown in a treeview representing the extensible XML within the command. An example is shown below:

11.3.6   Clarity XML Socket Server GUI shortcut command line switches

The table below documents the full complement of available switches and their parameters:

Switch	Conditions	Parameters	Example	Description
-AUTOCONNECT				Defines that the Clarity XML Socket Server application should automatically connect to a copy of the CG Tools software on the designated machine as specified in the Machine group box [1016] on the Socket Server Options dialog box [1016] (usually the localhost).
-DELAY		n seconds	10	Defines the delay before the Clarity XML Socket Server application starts. Enables major Windows components to load first if the program shortcut is placed in the Startup program group.

SEE ALSO

Configure command line switches for the XML Socket Server shortcut [1022]

11.3.6.1   Configuring command line switches for the XML Socket Server shortcut

The program shortcut can feature various command line switches that configure how the application is started. By default, the XML Socket Server shortcut is placed in the following program group:

```
C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd.
```

Note that this is the default installation location and this may be different to the CG Tools installation on your system.

To edit the shortcut:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1022

Copyright © 2000-2006 Pixel Power Ltd.

1. Select Start>All Programs>Pixel Power Ltd.
2. Right-click on the XML Socket Server shortcut and select Properties from the shortcut menu. The XML Socket Server properties box is displayed.
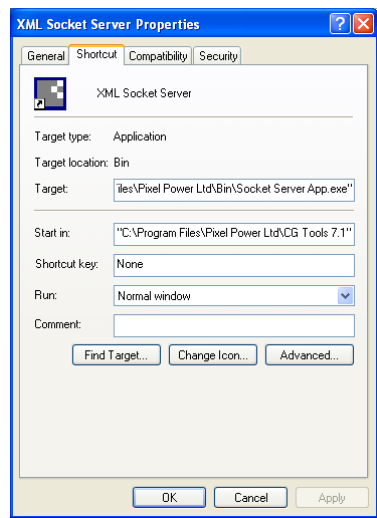
3. Edit the shortcut in the Target text box.

Below is an example shortcut target:

```
"C:\Program Files\Pixel Power Ltd\Bin\Socket Server App.exe" -AUTOCONNECT
```

This shortcut configures the Clarity XML Socket Server application to connect automatically to a copy of the CG Tools software on the designated machine as specified in the Machine group box |1018| on the Socket Server Options dialog box |1016| (usually the localhost). For more information on the full complement of available switches and their parameters, see Clarity XML Socket Server GUI shortcut command line switches |1022|.

11.3.7   System Tray icon states

The current state of the Clarity XML Socket Server application is shown by the System Tray icon.

Icon	Colour	Description
	Red	Clarity XML Socket Server application is unconnected or has encountered a problem trying to connect to the CG Tools software on the designated machine as specified in the Machine group |1018| box on the Socket Server Options dialog box |1016|.
	Black/ Grey	Clarity XML Socket Server application is running and has connected correctly.
	Blue	Clarity XML Socket Server is communicating and waiting for a response.

11.3.8   System Tray shortcut menu commands

A shortcut menu can be displayed by right-clicking on the System Tray icon. The following commands are available:

Option	Description
Options	Display the Socket Server Options dialog box |1016|.
About	Display the About Socket Server dialog box |1015|.

Option	Description
Show XML Command	Display or hide the <u>Show XML Commands dialog box</u> [1019].
Show XML Feedback	Display or hide the <u>Show XML Feedback dialog box</u> [1021].
Connected	Initiate a connection with the CG Tools software on the designated machine as specified in the <u>Machine group box</u> [1018] on the <u>Socket Server Options dialog box</u> [1016]. If already connected (indicated by an adjacent tick), selecting this command disconnects from the connected copy of the CG Tools software on the designated machine.
Exit	Exit the application.

11.3.9 Clarity XML Socket Server application logs

Application and communications logging can be turned on for the Clarity XML Socket Server using the controls in the <u>Log File Options group box</u> [1018] in the <u>Connection group box</u> [1016] on the <u>Socket Server Options dialog box</u> [1016].

Logs for the Clarity XML Socket Server application are written by default to the following folder:

`C:\Program Files\Pixel Power Ltd\PixelPowerApplicationLogs\XML Socket Server`

Log files are created when communications are initiated between the Clarity XML Socket Server application and the CG Tools software running on the designated machine as specified in the <u>Machine group box</u> [1018] on the <u>Socket Server Options dialog box</u> [1016] (usually the localhost).

 Each log file is named using the following convention:

`<log type> - Day_Month_Year.<log><xml>`

Communication is logged within this same file up until 23.59, after which a new log is created for the next 24 hours.

Each event is logged to an accuracy of 1/100th of a second.

Logs may be requested by <u>Pixel Power technical support</u> [103] to help solve customer problems.

The following log files are available and their creation on the local system is dependant on the settings in the <u>Log File Options group</u> [1018] box in the <u>Connection group box</u> [1016] on the <u>Socket Server Options dialog box</u> [1016].

Type	Sub-folder location	File format	Description
Application	`\Application`	Text	Contains log files that have recorded application activity.
Command	`\Command`	Extensible XML	Contains log files that have recorded incoming and outgoing commands.
Feedback	`\Feedback`	Extensible XML	Contains log files that have recorded feedback commands.
Incoming feedback	`\Incoming Feedback - XML`	Extensible XML	Contains log files that have recorded incoming feedback commands.

11.4   RapidRecall Keypad Server

The RapidRecall Keypad Server application communicates between the CG Tools software and the keypad. The Network version [1026] of the GUI is shown below. For more information on installing a keypad and using the RapidRecall Keypad Server, see Keypads [211] in the Getting Started [114] section.

The `RapidRecallKeypad.exe` application is installed as part of the CG Tools software installation.
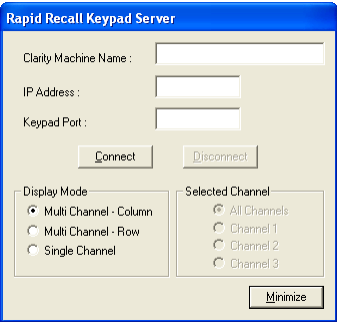
After the application has been started, it appears enabling you to see whether a connection has been made automatically. If a connection has not been initiated automatically using the relevant command line switches [1027], you can configure connection settings and then connect manually. At any time, you can click on the Minimize button [1026]. The application will be subsequently minimized and will appear using the default Pixel Power icon in the System Tray [1028].

After installation, the following resources are available.

Variable	Value
Executable	`RapidRecallKeypad.exe`
Path	`C:\Program Files\Pixel Power Ltd\Bin`

SEE ALSO

Keypads [211]
Applicable software version [1025]
Overview [1025]

11.4.1   Applicable software version

This documentation applies to the following version of software:

RapidRecall Keypad Server, Version 3.0.0.2

11.4.2   Overview

The follow sections are featured in the documentation. New or edited sections since the last release are highlighted with dark grey shading.

Section	Description
Description of the RapidRecall Keypad Server GUI [1026]	Lists the GUI components available on the RapidRecall Keypad Server.
RapidRecall Keypad Server shortcut command line switches [1027]	Describes the full complement of available switches and their parameters.
System Tray icon states [1028]	Describes System Tray icon states.
System Tray shortcut menu commands [1028]	Explains the command available in the shortcut menu which be displayed by right-clicking on the System Tray icon.

Section	Description
RapidRecall Keypad Server application logs [1029]	Describes application logging.

11.4.3 Description of the RapidRecall Keypad Server GUI

The following GUI descriptions are available:

Network mode [1026]

11.4.3.1 Network mode

The table below lists the GUI components available on the RapidRecall Keypad Server that has started in network mode.
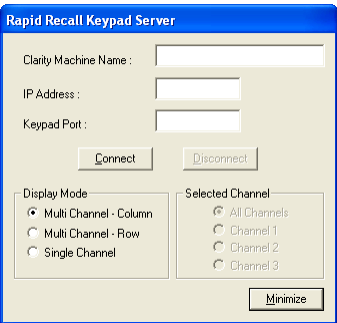
Clarity Machine Name text box

Using the Clarity Machine Name text box, specify a Clarity system hostname that the RapidRecall Keypad Server application will connect to. If this is not specified then `localhost` is assumed (i.e. the local system). This text box can be automatically filled by the `-CLARITY` command line switch [1027] during application start-up.

IP Address text box

Using the IP Address text box, specify the IP address of the RapidRecall keypad [21] or RapidRecall virtual keypad [1030] that the RapidRecall Keypad Server application will connect to. This text box can be automatically filled by the `-IPADDRESS` command line switch [1027] during application start-up.

Keypad Port text box

Using the Keypad Port drop-down list box, specify the Windows communication port (default is 10255) that will be used to send and receive data.

Connect button

If not already connected, select Connect to initiate a DCOM connection between the RapidRecall Keypad Server application, the defined RapidRecall keypad [21] or RapidRecall virtual keypad [1030] and the defined Clarity system unit. This function can be automatically actioned by the `-AUTOCONNECT` command line switch [1027] during application start-up.

Disconnect button

When connected, select Disconnect to break the DCOM connection between the RapidRecall Keypad Server application, the defined RapidRecall keypad [21] or RapidRecall virtual keypad [1030] and the defined Clarity system unit.

Display Mode group box

The options in this group box enable the selection of the display mode for the connected keypads' display.

Item	Situation
[Multi Channel - Column](241)	If you are using a multi-channel system unit and want the channel information split horizontally across the keypad display. This setting can also be selected using the [Alt + 1 key combination](238).
[Multi Channel - Row](241)	If you are using a multi-channel system unit and want the channel information split vertically across the keypad display. This setting can also be selected using the [Alt + 2 key combination](238).
[Single Channel](241)	If you are using a multi-channel or single system unit and will be controlling a single channel. This setting can also be selected using the [Alt + 3 key combination](238).

Selected Channel group box

The options in this group box enable the selection of the channel(s) to be controlled on the connected host Clarity system unit. Selected channels are indicated by an asterisk (*) in the relevant field on the [keypad display](241). This setting can also be selected using the [Chan key](238) on the keypad.

Item	Situation
All Channels	Playout control to be actioned on all available channels.
Channel 1	Playout control to be actioned on channel 1.
Channel 2	Playout control to be actioned on channel 2.
Channel 3	Playout control to be actioned on channel 3.

Minimize button

At any time, you can click on the Minimize button. The application will be subsequently minimized and will appear using the default Pixel Power icon in the [System Tray](1028). A [shortcut menu](1028) can be displayed by right-clicking on the icon.

11.4.4 RapidRecall Keypad Server shortcut command line switches

The table below documents the full complement of available switches and their parameters:

Switch	Conditions	Parameters	Example	Description
–TYPE		NETWORK		Starts the RapidRecall Keypad Server application in network mode. The software will try to initiate a connection using an ethernet connection to the RapidRecall keypad specified by the –IPADDRESS switch.
		SERIAL		Starts the RapidRecall Keypad Server application in serial mode. The software will try to initiate a connection to the RapidRecall keypad connected to the local system using the COM port defined by the –PORT switch.
–IPADDRESS	Only used for -TYPE NETWORK	IP ADDRESS	182.123.156.147	IP address of the RapidRecall keypad or standalone PC running the RapidRecall virtual keypad that the RapidRecall Keypad Server application will connect to.
–PORT	Only used for -TYPE SERIAL	PORT NAME	COM1	Defines the serial port to be used for communication on the local system. The port naming convention is the same as that used by the Microsoft® Windows® Device Manager.

Switch	Conditions	Parameters	Example	Description
`-CLARITY`		IP ADDRESS or DNS HOSTNAME	182.123.156.147	Defines the Clarity system hostname that the RapidRecall Keypad Server application will connect to. If this is not specified then `localhost` is assumed (i.e. the local system).
`-AUTOCONNECT`				Defines that the RapidRecall Keypad Server application should automatically connect to the Clarity system specified using the `-CLARITY` switch.
`-HEARTBEAT`	Only used for `-TYPE NETWORK`	n seconds	10	If defined, sends a heartbeat poll via the ethernet network to maintain the keypad IP address on IP routing tables used by any routers on your network. This ensures that keypad response times are always maintained to their optimum level. This setting defaults to 5 second unless explicitly specified. This setting should generally be left at the default unless problems are experienced.

11.4.5   System Tray icon states

The current state of the RapidRecall Keypad Server application is shown by the System Tray icon (default Pixel Power icon). Once the application has started successfully, the icon is blue. If the application does not appear automatically, right-click on the icon in the System Tray and select Restore from the shortcut menu [1028].

Icon	Colour	Application
	Yellow	RapidRecall Keypad Server application is starting.
	Red	RapidRecall Keypad Server application has encountered a problem trying to connect to the RapidRecall keypad [211] or RapidRecall virtual keypad [1030].
	Blue	RapidRecall Keypad Server application is running and has connected correctly.

11.4.6   System Tray shortcut menu commands

A shortcut menu can be displayed by right-clicking on the System Tray icon. The following commands are available:

Option	Description
Connected	If checked and in bold, shows that the application has connected correctly.
About	Display the About dialog box.
Restore	Restore the application from its minimized status.
Exit	Exit the application.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1028

Copyright © 2000-2006 Pixel Power Ltd.

11.4.7   RapidRecall Keypad Server application logs

Logs for Clarity XML Socket Server application are written by default to the following folder:

`C:\Program Files\Pixel Power Ltd\PixelPowerApplicationLogs\Rapid Recall Keypad`

Log files are created when the RapidRecall Keypad Server application is started for the first time or a feature requiring a log file to be created is actioned. Each log file is named using the following convention:

`<log type> - Day_Month_Year.log`

Subsequent use of the application or a specific feature is logged within this same file up until 23.59, after which a new log is created for the next 24 hours.

Each event is logged to an accuracy of 1/100th of a second.

Logs may be requested by Pixel Power technical support [103] to help solve customer problems.

11.5 RapidRecall Virtual Keypad

The RapidRecall virtual keypad application mimics a physical Version 2 RapidRecall Keypad and can be used to control the playout of the Clarity software on the same system or another Clarity system unit on the same ethernet network. The RapidRecall virtual keypad gives quick recall of stills, clips and character generator pages from within a prepared job. The 4 line display gives operator confidence in what is prepared for air. The keypad is currently offered in a single layout 214 targeting the character generation/playout application.
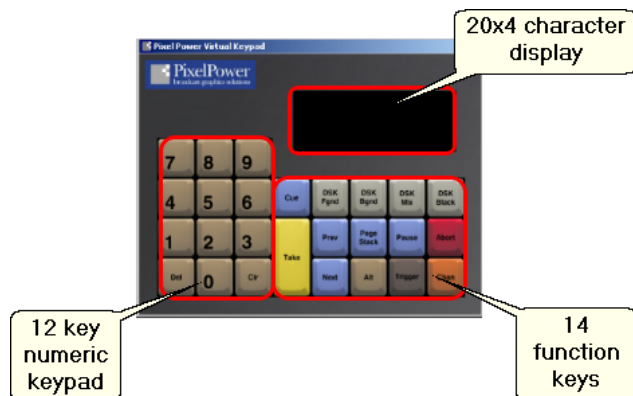
A useful potential implementation of the RapidRecall virtual keypad application is the wireless control of a Clarity system via a tablet PC:

SEE ALSO

11.5.1 Applicable software version

This documentation applies to the following version of software:

RapidRecall Virtual Keypad, Version 1.0

11.5.2 Keypad layout

The following keypad layout is currently available with the RapidRecall virtual keypad application.

Layout	Illustration
Playout Control *Fulfils the specific requirement for playout control of output from Clarity systems.*	

11.5.3 Limitations

The following limitations apply when using the keypad:

- The RapidRecall virtual keypad application can only be connected to both a single instance of the RapidRecall Server application and CG Tools software derivative on a playout system unit at any one time.

11.5.4 Terms and definitions

The table below lists terms and definitions used in this example.

Term	Definition
Keypad	RapidRecall virtual keypad application with the <u>Playout Control key set</u> [1031].
Host Clarity system unit	Clarity system unit to be controlled by the standalone keypad.
RapidRecall Server application	Software that communicates between the CG Tools software and the keypad (`RapidRecallKeypad.exe`).

11.5.5 Example A - Installation of the RapidRecall virtual keypad for use over ethernet networks

The RapidRecall virtual keypad is designed to control host Clarity system unit playout or playout on a Clarity system unit via a standalone PC over an ethernet network connection. This section details an example installation to work over an ethernet network connection.

Section	Description
<u>Description of example installation</u> [1032]	Describes the installation.

Section	Description
Required system software versions [1033]	Check that you have the right software components installed.
	Graphical representation of system components and how they are connected.
Login into Microsoft® Windows® on host Clarity system and standalone PC unit with administrator rights (1) [1036]	To enable correct installation of the RapidRecall virtual keypad and configuration of DCOM settings.
Install the RapidRecall virtual keypad software on the standalone PC (2) [1036]	The RapidRecall virtual keypad software should be installed on either the host Clarity system that you want to control or a standalone PC on the same ethernet network as the Clarity system that you want to control. For this example, we are going to install the application on a standalone PC.
Configure DCOM settings on host Clarity system (3) [1038]	It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.
Open the keypad communication port through the Windows firewall on the host Clarity system and standalone PC (4) [1038]	For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on the host Clarity system and standalone PC.
Configure RapidRecall virtual keypad on the standalone PC (5) [1040]	With the host Clarity system configured with the correct DCOM settings and the relevant port opened through the firewalls, you can now configure the RapidRecall virtual keypad application.
Start RapidRecall virtual keypad on the standalone PC (6) [1042]	Now that you have configured the RapidRecall virtual keypad application shortcut on the standalone PC with the required settings, you can finally start the RapidRecall virtual keypad application.
Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (7) [1042]	With the RapidRecall virtual keypad application running on the standalone PC and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Server application.
Start the RapidRecall Keypad Server on host Clarity system unit (8) [1043]	Now that you have configured the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.
Check the RapidRecall virtual keypad is connected (9) [1044]	With the RapidRecall Keypad Server connected on the host Clarity system unit, you can now check that the RapidRecall virtual keypad is connected on the standalone PC.

11.5.5.1 Description of example installation

This example utilises ethernet network communication:

a) The host Clarity system (`KeypadHost`) is installed with a copy of the CG Tools software. Version 7.1 is used in this example. A copy of the RapidRecall Server application is also installed on the host Clarity system. Version 3.0.0.0 is used in this example. See Required host system software versions [1033] for more information.

   It is important to note that the RapidRecall Server application does not have to be installed on the same system but does simplify installation.

b) The standalone PC (with the IP address `192.168.080.181` in this example) is installed with a copy of the RapidRecall virtual keypad application.

c) To enable communication, DCOM settings are configured for the CG Tools software (Clarity.exe) on the host Clarity system. The keypad communication port (10255) is also opened on the Windows firewall on the host Clarity system and on the standalone PC.

It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on any additional firewalls present within the ethernet network infrastructure.

11.5.5.2 Required system software versions

The following software sections apply:

Host Clarity system 1033
Standalone PC 1034

11.5.5.2.1 Host Clarity system

The table below lists the software versions that need to be installed on the selected host Clarity system unit in order for the RapidRecall virtual keypad to function correctly.

Software	Version
CG Tools	4.4.0.1 or later.
RapidRecall Keypad Server (RapidRecallKeypad.exe) 1025	3.0.0.0 or later.

The `RapidRecallKeypad.exe` application is installed as part of the CG Tools software installation. To check the version installed on the selected host Clarity system unit, follow the steps below:

1. Navigate to the following location using normal Windows methods:

   `C:\Program Files\Pixel Power Ltd\Bin`

   Note that this is the default installation location and this may be different to the CG Tools installation on the selected host Clarity system unit.

2. Right-click on the `RapidRecallKeypad.exe` file and select properties from the shortcut menu that appears. The Properties dialog box is displayed.

3. The File Version parameter should display a version later than 3.0.0.0.

If this is not the case, then you will have to copy a new version from the supplied CD-ROM into the `C:\Program Files\Pixel Power Ltd\Bin` folder. If you are not in possession of the required version, please contact Pixel Power Technical Support 103.

11.5.5.2.2 Standalone PC

The table below lists the software versions that need to be installed on the standalone PC.

Software	Version
RapidRecall virtual keypad (Virtual Keypad.exe)	N/A

The `Virtual Keypad.exe` application is NOT installed as part of the CG Tools software installation. Please contact Pixel Power Technical Support [103] for more information. After installation of the RapidRecall virtual keypad software, the following resources are available:

Variable	Value
Executable	`Virtual Keypad.exe`
Configuration	`Virtual Keypad.exe.config` [1044]
Default installation path	`C:\Program Files\Pixel Power Ltd\Pixel Power Virtual Keypad`

11.5.5.3 Graphical representation of system components

Ethernet Switch/Router

ETHERNET

Standalone PC

Standalone PC running RapidRecall virtual keypad

DCOM

RapidRecall virtual
keypad application
(Virtual Keypad.exe)

RapidRecall virtual keypad
application runs on a
standalone PC. The PC's IP
address is specified as the IP
address on the RapidRecall
Keypad Server running on the
host Clarity system.

Clarity system unit running
the RapidRecall Keypad
Server and a copy of the CG
Tools software. This is the
system to be controlled by
the RapidRecall virtual
keypad.

Clarity system unit

DCOM

CG Tools software
(Clarity.exe)

COM

RapidRecall Keypad Server
(RapidRecallKeypad.exe)

Host Clarity system to be controlled by RapidRecall virtual keypad

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

11.5.5.4 Login into Microsoft® Windows® on host Clarity system and standalone PC unit with administrator rights (1)

Follow the steps below:

1. Start the host Clarity system unit or standalone PC in the normal manner.
2. When prompted, log in to Microsoft® Windows® as a user with administrative privileges (e.g. Administrator).

Continue to .

11.5.5.5 Install the RapidRecall virtual keypad software on the standalone PC (2)

The RapidRecall virtual keypad software can be installed on either the host Clarity system that you want to control or a standalone PC on the same ethernet network as the Clarity system that you want to control. For this example, we are going to install the application on a standalone PC. To install the RapidRecall virtual keypad software, follow the steps below:

1. Insert the installation media supplied to you and run the SETUP.EXE program located at the root of the CD-ROM. The installation starts.
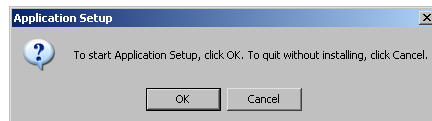
2. Select OK to begin the installation. The following screen is displayed.

3. Select Next to continue the installation.
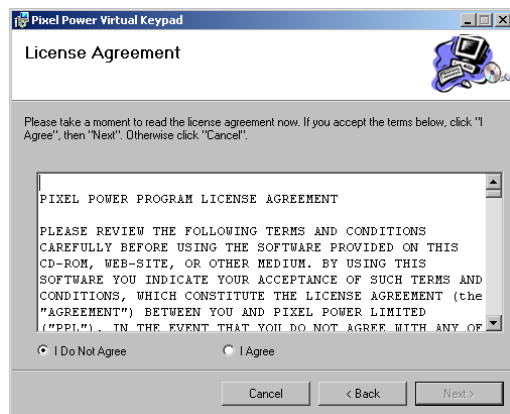
4. Read the licence information, then select I Agree if you agree to the terms and conditions of the licence agreement. Select Next to continue.
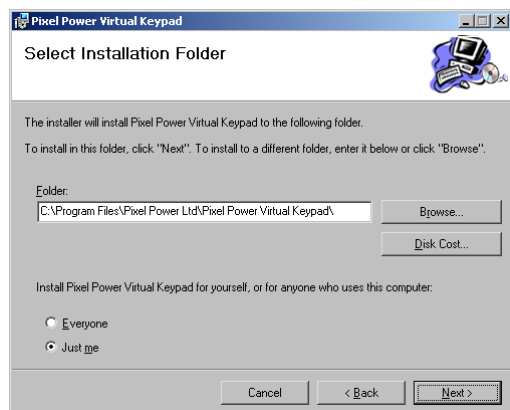
5. Select Next to accept the default installation path or select Browse to navigate to a location where you want to install the software.
6. Select whether you want the software to be available to Everyone or Just me using the designated radio buttons.
7. Select Next.
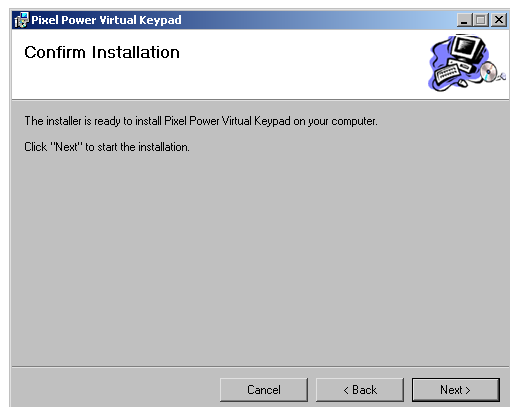
8. To confirm the installation, select Next. The software is installed.
9. Select Close to complete the installation.

Continue to <u>Configure DCOM settings on host Clarity system</u> 1038.

NOTE

This installation installs the Microsoft .NET Framework. Please ensure that you use Windows Update to check for any critical updates to the .NET Framework. For more information on the Microsoft .NET Framework, see <u>http://msdn.</u>

microsoft.com/netframework/gettingstarted/default.aspx.

11.5.5.6 Configure DCOM settings on host Clarity system (3)

In this example, information between the CG Tools software and the RapidRecall Keypad Server application is communicated using COM due to both software applications being installed on the same system. If the RapidRecall Keypad Server application is installed on a machine other than the Clarity host, then DCOM is used.

It is vitally important that the DCOM settings on all machines must be configured correctly to enable communication.

For this example, only DCOM settings for the Clarity executable on the host Clarity system have to be configured. You must be logged in as a user with administrator privileges to configure DCOM and firewall settings.

To enable DCOM access for the Clarity executable on the host Clarity system, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for the CG Tools software application on HOST systems [1068]

If the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then DCOM settings for this application will also have to be configured. To enable DCOM access for the RapidRecall Keypad Server (`RapidRecallKeypad.exe`) executable, please refer to the following sections for more information:

Important information [1059]
Configuring DCOM access through firewalls (OPTIONAL) [1059]
Enabling DCOM for software applications on REMOTE systems [1062]

After configuring the required settings, continue to Open the keypad communication port through the Windows firewall on the host Clarity system and standalone PC [1038].

11.5.5.7 Open the keypad communication port through the Windows firewall on the host Clarity system and standalone PC (4)

For this example installation, the keypad communication port (10255) must be also opened on the Windows firewall on both the host Clarity system AND the standalone PC. This enables un-impeded communication between the RapidRecall virtual keypad application, the RapidRecall Keypad Server application and the selected CG Tools software derivative (Clarity.exe).

It is important to note that if the RapidRecall Keypad Server application is installed on a machine other than the host Clarity system, then the keypad communication port will have to be opened on that machine AND additional firewalls present within the ethernet network infrastructure.

Follow the steps below:

11. Supporting applications and tools

RapidRecall Virtual Keypad

1. Select Start>Control Panel. The Control Panel is displayed (category view shown below; differs to optional classic).

2. Select Security Centre. The Security Centre is displayed.

3.   Select Windows Firewall. The Windows Firewall dialog box is displayed.

4.   Ensure that the On box is checked.
5   Select the Exceptions dialog tab.
6.   Select Add Port. The Add a Port dialog box is displayed.
7.   To enable incoming and outgoing communication on port 10255, enter RapidRecall Keypad in the Name text box and 10255 in the Port Number box.

8.   Select OK to close the Add a Port dialog box. This will add a new TCP/IP port 10255 under the name RapidRecall Keypad.
9.   Select OK to close the Windows Firewall dialog box.

Continue to Configure RapidRecall virtual keypad on the standalone PC 1040.

11.5.5.8   Configure RapidRecall virtual keypad on the standalone PC (5)

With the host Clarity system configured with the correct DCOM settings and the relevant port opened through the firewalls, you can now configure the RapidRecall virtual keypad application. Configuration of how the RapidRecall virtual keypad software starts and how it displays information on the 20x4 character display is achieved using the `Virtual Keypad.exe.config` file. This file is located in the same folder as the `Virtual Keypad.exe` e.g. `C:\Program Files\Pixel Power Ltd\Pixel Power Virtual Keypad`.

Note that this is the default installation location and this may be different to the installation on your system.

To edit the settings:

1.   Open Windows Explorer.
2.   Browse to `C:\Program Files\Pixel Power Ltd\Pixel Power Virtual Keypad`.
3.   Right-click on the `Virtual Keypad.exe` file, then select Open With from the shortcut menu.

      A message is displayed stating that Windows cannot open the file.

11. Supporting applications and tools

RapidRecall Virtual Keypad
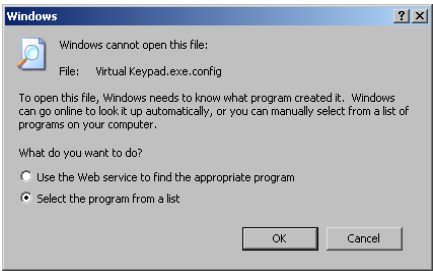
4. Choose the Select program from a list option, then select OK. The Open With dialog box is displayed.
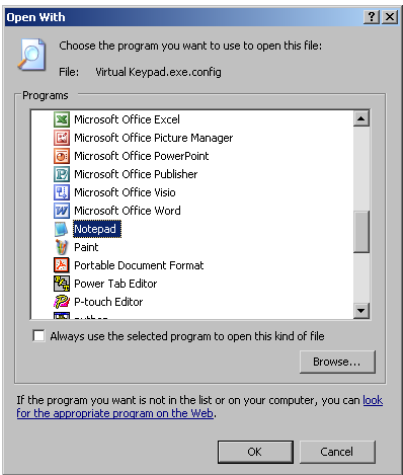
5. Select a text or XML editor from the list e.g. Notepad. The `Virtual Keypad.exe.config` file opens in the selected editor.
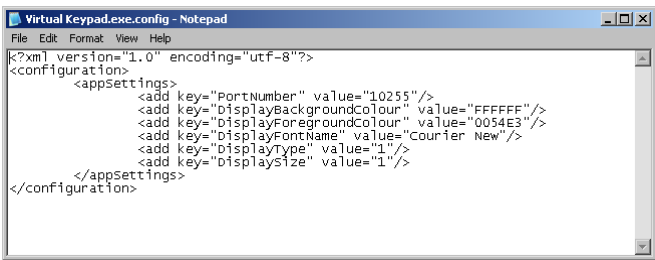
6. The only setting that you need to edit at this stage is the size of the application. This is configured using the `DisplaySize` tag. If you are running a resolution of less than 1280 x 1024 pixels, then it is recommended that the application is started in its smaller version of 470 x 368 pixels.

Tag		Parameters	Description
	`DisplaySize`		Defines the screen size of the RapidRecall virtual keypad application in pixels.
		0	470 x 368
		1	762 x 607

You can leave the `PortNumber` tag with its default setting of `10255` as this is the port number that was opened through the firewalls in the earlier step.

There are a number of other settings that you can configure (display colour, font etc.). For more information on the full complement of available settings, see RapidRecall virtual keypad configuration (Virtual Keypad.exe.config) 1044.

Continue to Start RapidRecall virtual keypad on the standalone PC 1042.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

11.5.5.9 Start RapidRecall virtual keypad on the standalone PC (6)

Now that you have configured the RapidRecall virtual keypad application on the standalone PC with the required settings, you can finally start the RapidRecall virtual keypad application.

1. Select Start>All Programs>Pixel Power Ltd>RapidRecall Virtual Keypad. The RapidRecall virtual keypad application is started. You can also start the application from the Virtual Keypad desktop shortcut icon.
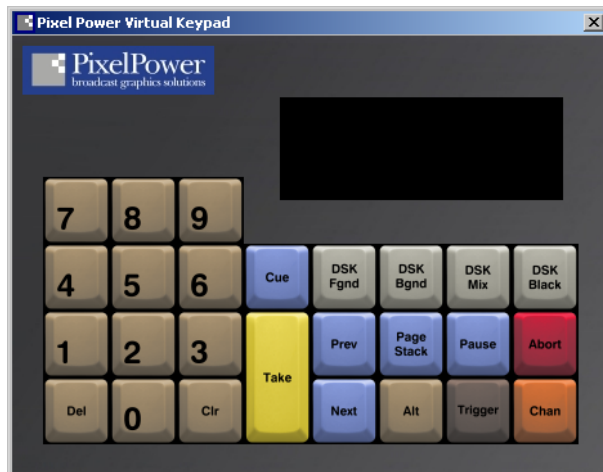
Continue to .

11.5.5.10 Configure command line switches for RapidRecall Keypad Playout Control Server shortcut (7)

With the RapidRecall virtual keypad application running on the standalone PC and with the host Clarity system configured with the correct DCOM settings, you can now configure the shortcut that starts the RapidRecall Keypad Server application. The RapidRecall Keypad Sever application communicates between a defined PC hosting the RapidRecall virtual keypad application and the Clarity system unit being used for playout.

The program shortcut can feature various command line switches that configure how the application is started.

By default, the RapidRecall Keypad Playout Control Server shortcut is placed in the following program group:

```
C:\Documents and Settings\All Users\Start Menu\Programs\Pixel Power Ltd.
```

Note that this is the default installation location and this may be different to the CG Tools installation on your system.

To edit the shortcut:

1. Select Start>All Programs>Pixel Power Ltd.
2. Right-click on the RapidRecall Keypad Playout Control Server shortcut and select Properties from the shortcut menu. The RapidRecall Keypad Playout Control Server properties box is displayed.

3. Edit the shortcut in the Target text box.

Below is the shortcut target used in this example:

```
"C:\Program Files\Pixel Power Ltd\Bin\RapidRecallKeypad.exe" –TYPE NETWORK –IPADDRESS
192.168.080.181 –CLARITY localhost –AUTOCONNECT
```

This shortcut configures the RapidRecall Keypad Sever application to connect automatically to the RapidRecall virtual keypad application on the standalone PC with the IP address `192.168.80.181` and connect to a copy of the CG Tools software on the host Clarity system unit (`localhost`). For more information on the full complement of available switches and their parameters, see RapidRecall Keypad Server shortcut command line switches 1027.

Continue to Start the RapidRecall Keypad Server on host Clarity system unit 227.

11.5.5.11 Start the RapidRecall Keypad Server on host Clarity system unit (8)

Now that you have configured the RapidRecall Keypad Playout Control Server shortcut on the host Clarity system unit with the required switches, you can finally start the RapidRecall Keypad Server application on the host Clarity system unit.

1. Select Start>All Programs>Pixel Power Ltd>RapidRecall Keypad Playout Server. The RapidRecall Keypad Server application is started.

a)	The first thing that occurs is that the RapidRecall Keypad Server application checks what mode to start in. This corresponds to the `–TYPE` switch defined in the shortcut (in this case `NETWORK`). This setting configures the application to use the GUI related to network operation.
b)	The RapidRecall Keypad Server application then checks the Clarity system unit on which to start the CG Tools software derivative. This corresponds to the `–CLARITY` switch defined in the shortcut (in this case `localhost`).
c)	The installed CG Tools software derivative (in this case Clarity) is then started using a COM/DCOM connection.
d)	The RapidRecall Keypad Server application then tries to connect automatically to the defined standalone PC running the RapidRecall virtual keypad. This corresponds to the `–IPADDRESS` switch defined in the shortcut (in this case `192.168.080.181`) and the `–AUTOCONNECT` switch.

2. After the above has been completed successfully, the RapidRecall Keypad Server application starts in the network GUI configuration. Whilst the RapidRecall Keypad Server application is starting, the System Tray icon 1028 (default Pixel Power icon) is yellow. Once it has started successfully, the icon is blue. If the application does not appear automatically, right-click on the icon in the System Tray and select Restore from the shortcut menu 1028.

Some parts of user interface are greyed out due to the keypad already being connected. The setting selected in the Display Mode group will affect what is displayed on the keypad display after connection 241. The setting selected in the Selected Channel group box is indicated by an asterisk next to the channel label on the keypad display. For more information on the RapidRecall Keypad Server GUI, see Description of the RapidRecall Keypad Server GUI 1026.

11.5.5.12   Check the RapidRecall virtual keypad is connected (9)

With the RapidRecall Keypad Server connected on the host Clarity system unit, you can now check that the RapidRecall virtual keypad is connected on the standalone PC. The 4 line display should show a display similar to one of those documented in the Display synopsis for Playout Control 241 section:
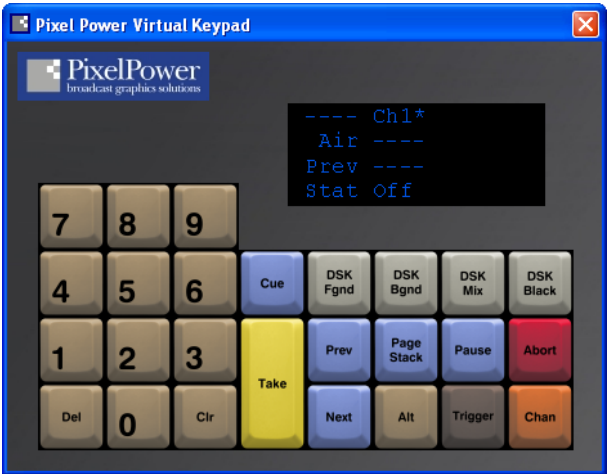
11.5.6   RapidRecall virtual keypad configuration (Virtual Keypad.exe.config)

Configuration of how the RapidRecall virtual keypad software starts and how it displays information on the 20x4 character display is achieved using the `Virtual Keypad.exe.config` file. This file is located in the same folder as the `Virtual Keypad.exe` e.g. `C:\Program Files\Pixel Power Ltd\Pixel Power Virtual Keypad`.

The file contains XML tags to configure specific values. Below is an example file:

```
<?xml version="1.0" encoding="utf-8"?>
<configuration>
        <appSettings>
                <add key="PortNumber" value="10255"/>
                <add key ="DisplayBackgroundColour" value="000000"/>
                <add key ="DisplayForegroundColour" value="0054E3"/>
                <add key ="DisplayFontName" value="Courier New"/>
                <add key ="DisplayType" value="1"/>
                <add key ="DisplaySize" value="0"/>
        </appSettings>
</configuration>
```

The tables below documents the full complement of available tags and their parameters:

The file always contains a `<configuration>` tag.

Tag		Parameters	Description
configuration			Defines configuration attributes.
	appSettings		Application settings.

Contained within the `<appSettings>` tag there are a number of configuration tags.

Tag		Parameters	Description
appSettings			Contains attributes that define specific application settings.
	PortNumber		Defines the keypad communication port. Default is 10255. Must be also opened on the Windows firewall on the host Clarity system and the PC running the RapidRecall virtual keypad application. This enables un-impeded communication between the RapidRecall virtual keypad application and the selected CG Tools software derivative (Clarity.exe).
		<port number>	Port number.
	DisplayBackgroundColour		Defines the background colour of the 20x4 character display. Default is black (000000)
		<hexadecimal colour reference>	Colour.
	DisplayForegroundColour		Defines the foreground text colour of the 20x4 character display. Default is blue (0054E3)
		<hexadecimal colour reference>	Colour.
	DisplayFontName		Defines the font used by the 20x4 character display. Default is Courier New.
		<font name>	Font name.
	DisplayType		Not used.
	DisplaySize		Defines the screen size of the RapidRecall virtual keypad application in pixels.
		0	470 x 368
		1	762 x 607

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

11.5.7 Description of keypad keys

The following keys descriptions are available:

Keypad synopsis for Playout Control 238

11.5.7.1 Keypad synopsis for Playout Control

The illustration below shows the dedicated keys available with the Version 2 RapidRecall keypad 214 and RapidRecall virtual keypad application 1031 with the Playout Control key configuration. Click on a key to learn more (online documentation only).

Key	Details			
	Action	**+ Key**	**Action**	**Keypad display area affected or used** 241
Del	Delete character to the right of the cursor in the keypad numeric entry field on the keypad display.			- - - -
0	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
Clr	Delete all numeric characters from the keypad numeric entry field on the keypad display.			- - - -
1	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Multi-Channel Column. *Must be pressed and held down before pressing the secondary key.*	See Display Mode group box. 1026

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1046

Copyright © 2000-2006 Pixel Power Ltd.

Key	Details			Keypad display area affected or used [241]
	Action	**+ Key**	**Action**	
2	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Multi-Channel Row. *Must be pressed and held down before pressing the secondary key.*	See Display Mode group box. [1026]
3	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
		Alt	Set keypad display mode to Single Channel. *Must be pressed and held down before pressing the secondary key.*	See Display Mode group box. [1026]
4	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
5	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
6	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
7	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
8	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
9	Enter numeric character in the keypad numeric entry field on the keypad display.			- - - -
Take	Takes the page or still shown by the keypad Prev or Pr field value to the selected channel and displays it on the Program output.			- - - -
	If no page/still is cued (shown by the keypad Prev or Pr field value), takes the page/still corresponding to the value present in the keypad numeric entry field and then displays it on the Program output as fast as possible.			- - - -
	Updates the keypad Air field to match the currently aired page.			- - - -
	Updates the Page Name fields (if relevant) to match the currently aired page.			
Cue	Prepares the page or still shown by the keypad numeric entry field value to the selected channel and displays it on the Edit output.			- - - -
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Next	Prepares the next page/still for the selected channel in the current job/stack and displays it on the Edit output.			- - - -
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Prev	Prepares the previous page/still for the selected channel in the current job/stack and displays it on the Edit output.			
	Updates the keypad Prev or Pr field for the selected channel with that value (the next page in the job/stack).			- - - -
Page Stack	Toggles the use of the current page stack if present. An S before the keypad numeric entry field indicates that the system is in page stack mode.			- - - -
Pause	Pause playout (e.g. pause foreground rolls or crawls).			

Key	Details			
	Action	**+ Key**	**Action**	**Keypad display area affected or used** [241]
Abort	Aborts the playout of the current page and idles the channel.			
	Updates the keypad Stat field for the selected channel to Idle.			
Trigger	Toggle trigger mode. *Must be pressed and held down before pressing the key sequence on the numeric keypad to trigger the animation. On the RapidRecall virtual keypad, a single press will toggle the Trigger key on, enabling the subsequent selection of a key sequence on the numeric keypad to trigger the animation.*	Numeric sequence	Triggers animation on current page relating to numeric key sequence.	
Alt	Provides temporary access to a secondary function on a selected key. *On the RapidRecall virtual keypad, a single press will toggle the Alt key on, enabling the subsequent selection of an operator key.*		See other keys for more details. *Must be pressed and held down before pressing the secondary key.*	
Chan	Toggle current keypad channel selection. The relevant channel field(s) are updated on the keypad display with an asterisk (*) to indicate selection.	Alt	Select all available channels. The relevant channel field(s) are updated on the keypad display with an asterisk (*) to indicate selection.	
DSK Fgnd	Set current selected channel DSK mode to foreground.	Alt	Set current selected channel DSK mode to foreground with fade.	
DSK Bgnd	Set current selected channel DSK mode to background.	Alt	Set current selected channel DSK mode to background with fade.	
DSK Mix	Set current selected channel DSK mode to mix.	Alt	Set current selected channel DSK mode to mix with fade.	
DSK Black	Set current selected channel DSK mode to output black.	Alt	Set current selected channel DSK mode to output black with fade.	

11.5.8 Description of keypad operating mode displays and channel status
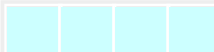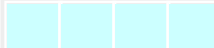
The following descriptions are available:

11.5.8.1 Channel status

The available status messages that can be displayed by the Stat field on the keypad display are explained below:

Message	Description	Keypad display area affected or used
Off	Channel currently offline.	
Idle	Channel currently idle.	

Message	Description	Keypad display area affected or used
Wait	Channel currently awaiting take.	
Prep	Channel currently preparing page.	
Take	Channel currently taking page.	

11.5.8.2 Display synopsis for Playout Control

This section explains the available display modes for the keypad with a Playout Control configuration.

Multi Channel-Column

```
S━━━━━ Ch1* Ch2* Ch3*
   Air ━━━━━ ━━━━━ ━━━━━
  Prev ━━━━━ ━━━━━ ━━━━━
  Stat Off   Off   Off
```

A synopsis of the display is shown below:

S	-	-	-	-	**C**	**h**	**1**	*****	**C**	**h**	**2**		**C**	**h**	**3**
	A	**i**	**r**		-	-	-	-	-	-	-	-	-	-	-
	P	**r**	**e**	**v**	-	-	-	-	**+**	-	-	-	-	-	-	-
	S	**t**	**a**	**t**											

S	-	-	-	-	(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.
					(Blue) These areas show the channels available.
					An asterisk (*) indicates the channel is selected.
	-	-	-	-	(Yellow) These areas show the current pages on air.
	-	-	-	-	(Purple) These areas show the current prepared pages.
					A '+' indicates a page is being prepared.
					(Light Blue) These areas show the current channel status.

Multi Channel-Row

```
Ch1* ------ page name
Ch2* ------ page name
Ch3* ------ page name
S------ Pr ------+ Off
```

A synopsis of the display is shown below:

	C	h	1	*		-	-	-	-										
	C	h	2			-	-	-	-										
	C	h	3			-	-	-	-										
S	-	-	-	-		P	r		-	-	-	-	+						

-	-	-	-		(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.
					(Blue) These areas show the channels available.
					An asterisk (*) the channel is selected.
-	-	-	-		(Yellow) These areas show the current pages on air.
					(Light Green) These areas show the names of the current pages on air.
-	-	-	-		(Purple) This area shows the prepared page for selected channel.
					A '+' indicates the page is being prepared.
					(Light Blue) This area shows the channel status for the selected channel.

Single Channel

```
Ch1* 625 (4:3)
  Air ------- page name
Prev ------+page name
Stat Offline  S-------
```

A synopsis of the display is shown below:

	C	h	1	*		6	2	5		(	4	:	3	)					
		A	i	r		-	-	-	-										
	P	r	e	v		-	-	-	-	+									
	S	t	a	t											S	-	-	-	-

(Blue)					(Blue) This area shows the selected channel.
					An asterisk (*) the channel is selected.
(Light Purple)					(Light Purple) This area shows the current video format of selected channel.
-	-	-	-		(Yellow) This area shows the current page on air.
(Light Green)					(Light Green) This area shows the name of the current page on air.
-	-	-	-		(Purple) This area shows the prepared page for the selected channel.
					A '+' indicates the page is being prepared.
(Red)					(Red) This area shows the name of the prepared page.
(Light Blue)					(Light Blue) This area shows the channel status for the selected channel.
-	-	-	-		(Orange) This area shows the current entered keypad number.
					An 'S' before the number indicates that the system is in page stack mode.

Section 12

Appendices

12. Appendices

New or edited sections since the last release are highlighted with dark grey shading. The following appendices are available:

Title	Description
CG Tools application logs [1055]	Information about the location and function of CG Tools application logs that may be requested by Pixel Power technical support [103] to help solve customer problems.
Command line file conversion [1056]	Information regarding the conversion of video and audio files of several differing formats to the .PPV and .PPA formats. This section is classed as work in progress and will be updated to feature more information about further command line tools when appropriate.
DCOM configuration	To enable remote access to software applications on remote systems e.g. Microsoft Excel, refer to the subsequent sections to make the necessary changes on the REMOTE machine [1062] (the machine being accessed remotely). To enable the CG Tools software application to make and receive DCOM calls to/from remote systems or other Clarity Servers, refer to the subsequent sections to make the necessary changes on the HOST machine [1068] (e.g. a Clarity system unit or Clarity Server).
Diagrams and images	Diagrams, illustrations and images referenced by other topics.
Error messages [1088]	Error messages generated by various areas of CG Tools software functionality and operation. This section is classed as work in progress and will be updated to feature more errors when appropriate.

12. Appendices

12.1　CG Tools application logs

All logs for Pixel Power CG Tools software derivatives and system hardware are written by default to the following folder:

`C:\Program Files\Pixel Power Ltd\PixelPowerApplicationLogs\CG Tools\`

Log files are created when a CG Tools software derivative is started for the first time or a feature requiring a log file to be created is actioned. Each log file is named using the following convention:

`<log type> - Day_Month_Year.log`

Subsequent use of the application or a specific feature is logged within this same file up until 23.59, after which a new log is created for the next 24 hours.

Each event is logged to an accuracy of 1/100th of a second.

Logs may be requested by Pixel Power technical support 103 to help solve customer problems.

The following log files are available and their presence on the local system is dependant on whether the required system or user action has been completed, thus creating the required folder:

Type	Sub-folder location	Description
Application	`\Application`	Any information that does not have its own separate log. This includes general information regarding CG Tools application flow for the main thread e.g. starting, stopping etc.
Clarity hardware control	`\Clarity Hardware Control`	Information regarding the interaction between system hardware and the CG Tools software derivative during system startup and shutdown.
Clip system	`\ClipInterface`	Information regarding the system clip interface and remote clip interface used by the CG Tools software.
Hardware status	`\HardwareLogFiles`	Information regarding the operation of system hardware (including the diagnostic console which will also be logged on systems without hardware). Contains sub-folders linked to processor ID.
File access problems	`\FileAccessProblems`	Information regarding access to system files.
Copying jobs	`\Job Copy`	Information regarding the progress and outcome of previous job copy operations.
File access within main application	`\Locks`	Information regarding access to document types used by the CG Tools software. Contains sub-folders linked to file type.
Job playout	`\Playout Control - Channel (1)` `\Playout Control - Channel (2)` `\Playout Queue - Channel (1)` `\Playout Queue - Channel (2)`	Information regarding the playout of jobs by the CG Tools software and underlying system hardware.
Remote control	`\Remote Control`	Information regarding the interaction between the CG Tools software derivative, system and any software that is controlling the CG Tools application remotely.
User login details	`\User Login Details`	Record of user login activity for the CG Tools software.

12.2   Command line file conversion

To assist the copying of audio and video clip files using FTP between PC systems and Clarity clip systems, the .PPA audio file type and .PPV video file types were implemented some time ago. Now that the Clarity FTP server features a mechanism to handle the interchange of files of this format, the ability to push and pull clips from Clarity clip systems is much easier. With definitive file formats available for audio and video clips outside of the Clarity clip system domain, we have introduced some conversion tools. It was identified as being desirable to convert video and audio files of several differing formats to/from the native .PPV and .PPA formats.

SEE ALSO

12.2.1   PPAudioConvert tool

The PPAudioConvert command line tool is available with each full installation of the CG Tools software.

The PPAudioConvert command line tool can be used to convert audio using the `PPAudioConverterDLL.dll`. This file is located in the following folder (assuming the default installation path):

`C:\Program Files\Pixel Power Ltd\Format Conversion`

The usage instructions will be displayed if you type `PPAudioConvert` from the command line without any parameters:

```
PPAudio Convert

Usage: ppaudioconvert sourcePath [targetPath] [/o]

        sourcePath : the path to the source audio file to convert.
        [targetPath] : the target path for the converted audio file.
        [/o] : overwrite existing files.
```

If no target is specified, the source path is used with the .PPA extension.

The `targetPath` parameter is optional and the tool will display information about the conversion, indicating a successful conversion or not and giving a meaningful error where possible. The `PPAudioConverterDLL.dll` provides three functions.

As well as using the command line, files can also be converted through the COM interface using the `IPPAudioConverter` COM interface. See the following sections for more information:

Note

This information can also be found in the following file and can be distributed as required:

`C:\Program Files\Pixel Power Ltd\Format Conversion\PPAudioConvert_Readme_v11.txt`

12.2.1.1   Convert function

The `Convert` function requires a destination path to be specified. Returns a `HRESULT` which under normal circumstances will be `S_OK`. Use the `pResult` parameter for the indication of a successful conversion. The syntax for this function is as follows:

```
HRESULT Convert(/*[in]*/ BSTR bstrSourceFile, /*[in]*/ BSTR bstrDestFile,
/*[in]*/VARIANT_BOOL bOverwriteFiles, /*[out, retval]*/ int *pResult);
```

Parameter	Description
bstrSourceFile	The path to the source audio file. This can be an .MP3, .WAV or .AIF/.AIFF file.
bstrDestFile	The path where the converted audio file (.PPA file) will be saved.

Parameter	Description
bOverwriteFiles	If set to TRUE, existing files will be overwritten automatically. If set to FALSE, convert will fail if the file already exists.

12.2.1.2   Convert_NoDest function

The Convert_NoDest function will use the source file path to construct a destination path by replacing the extension with .PPA. Returns a HRESULT which under normal circumstances will be S_OK. Use the pResult |1057⟩ parameter for the indication of a successful conversion.

The syntax for this function is as follows:

```
HRESULT Convert _NoDest (/*[in]*/ BSTR bstrSourceFile, /*[in]*/ VARIANT_BOOL
bOverwriteFiles, /*[out, retval]*/ int *pResult);
```

Parameter	Description
bstrSourceFile	The path to the source audio file. This can be an .MP3, .WAV or .AIF/.AIFF file.
bstrDestFile	The path where the converted audio file (.PPA file) will be saved.
bOverwriteFiles	If set to TRUE, existing files will be overwritten automatically. If set to FALSE, convert will fail if the file already exists.

12.2.1.3   GetLastError function

The GetLastError function obtains the last error message resulting from a call to the Convert function.

The syntax for this function is as follows:

```
HRESULT GetLastError(/*[out]*/ int *pErrorCode, /*[out]*/ BSTR *pbstrErrorString,/*[out,
retval]*/ VARIANT_BOOL *pbResult);.16. Clarity Clip Storage and Management [CLARITY]
```

Returns a HRESULT which under normal circumstances will be S_OK. Use the pbResult parameter for the indication of a successful conversion.

Parameter	Description
pErrorCode	Receives the error code of the last error.
pbstrErrorString	Receives the meaningful error message associated with the last error.
pbResult	Receives the result of the call to GetLastError; will be TRUE if a valid error message was obtained.

12.2.1.4   pResult parameter

revpResult receives an error code. 0 indicates success; greater than 0 indicates failure and the GetLastError |1057⟩ function can be used to get a meaningful error message.

12.2.2   PPVideoConvert tool

The PPVideoConvert command line tool is available with each full installation of the CG Tools software.

The PPVideoConvert command line tool can be used to convert video using the PPVideoConverterDLL.dll. This file is located in the following folder (assuming the default installation path):

C:\Program Files\Pixel Power Ltd\Format Conversion

Pixel Power Video (.PPV) and cel animation files can be created from sequences of images and any format of video that has a supporting video codec installed.

The usage instructions will be displayed if you type PPVideoConvert from the command line without any parameters:

```
PPVideo Convert

Usage: ppvideoconvert sourceFile targetFile [/o] [/s] [/a] [/p2i] [/k] [/v#] [/x#] [/y#]
        [/p#] [/f#] [/w#] [/h#]

        sourceFile/targetFile  : the source and target files for conversion.

Optional:
        [/o]    : overwrite files.
        [/s]    : silent operation, no progress bar.
        [/a]    : convert associated audio to PPA if present.
        [/p2i]  : convert progressive video to interlaced.
        [/k]    : extract frames with key channel.
        [/v#]   : # specifies the video format number. Defaults to 0 (PAL)
                        0  : PAL
                        1  : NTSC
        [/x#]   : # specifies the x position of the source video frames in the target
                    video frames. Defaults to 0 (left).
        [/y#]   : # specifies the y position of the source video frames in the target
                    video frames. Defaults to 0 (bottom).
        [/p#]   : # specifies the preview frame number. Defaults to 0.
        [/f#]   : # specifies the desired frame rate, for use when converting from
                    QuickTime files
        [/w#]   : # specifies the width of the converted video if the conversion
                    supports resize
        [/h#]   : # specifies the height of the converted video if the conversion
                    supports resize
```

As well as using the command line, files can also be converted through the COM interface using the `IPPVideoConverter` COM interface. See the following Microsoft Word document for more information:

C:\Program Files\Pixel Power Ltd\Format Conversion\PPVideoConverter.doc

Note

This information can also be found in the following file and can be distributed as required:

C:\Program Files\Pixel Power Ltd\Format Conversion\PPVideoConvert_Readme.txt

12.3 DCOM configuration

12.3.1 Important information

- Before configuring DCOM settings, you must be logged in as a user with Administrator privileges.
- These instructions are designed to be used in conjunction with systems running Microsoft® Windows® XP Service Pack 2.

12.3.2 Configuring DCOM access through firewalls (OPTIONAL)

In order for Clarity systems to be able to communicate with other systems, it is necessary for DCOM access to be properly setup. This is documented in subsequent sections. However if the customers site and network infrastructure mean that the Clarity machines will have to communicate through firewalls, then some extra optional configuration is probably necessary. This is explained below.

DCOM uses the TCP port number 135 to establish communications between systems, and the current DCOM documentation explains this. This port number is only used to establish communications and actual communication takes place on any port numbers between 1024 and 65535. The Microsoft® Windows® XP firewall automatically allows DCOM access to these port numbers if you have already opened up port 135, however most other software and hardware firewalls do not. If you do not wish to allow all ports between 1024 and 65535 to go through your firewall, then you will need to restrict the DCOM system to a specific range of port numbers that they you are prepared to use.

To restrict the port numbers that DCOM uses, implement the following registry fix on all Clarity system units on your network.

1. Select Start>Run. The Run dialog box is displayed.
2. Enter `regedt32.exe` in the Run text box, then select OK.

   Please note that the old `regedit.exe` version of the registry editor will not work.

3. Make sure that the `HKEY_LOCAL_MACHINE\Software\Microsoft\Rpc\Internet` registry location exists. If it does not exist, then right-click on `HKEY_LOCAL_MACHINE\Software\Microsoft\RPC,` select New>Key from the shortcut menu that appears and then enter `Internet` to name the key.
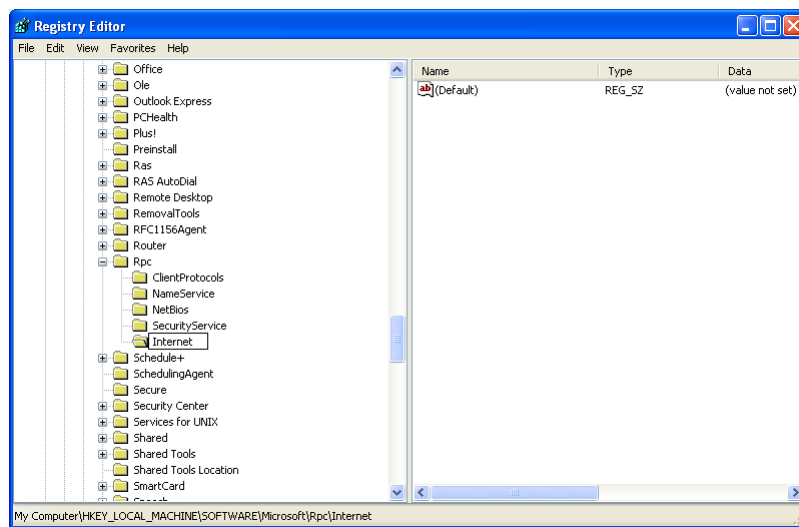
4. Create a registry value called `Ports` inside this location of the type Multi-String Value. To do this, right-click in the right-hand pane and select New>Multi-String Value from the shortcut menu that appears and then enter `Ports` to name the entry. It should show up in the list as the type `REG_MULTI_SZ`.
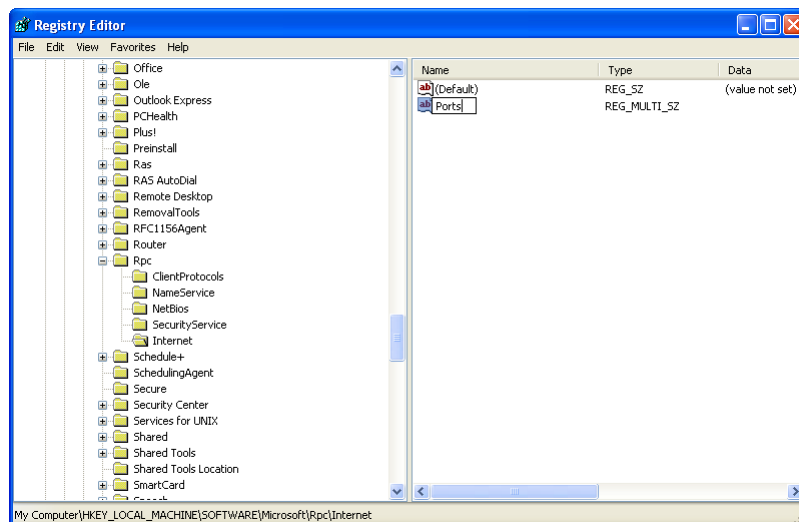
5. Right-click on the `Ports` entry and select Modify from the shortcut menu that appears. The Edit Multi-String dialog box appears.
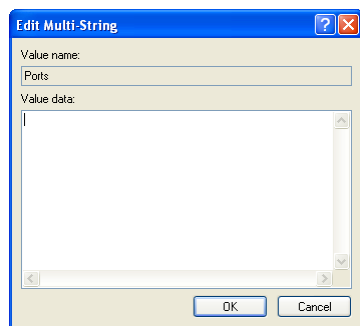
Here you can enter multiple single port numbers or ranges. For example entering:

```
3000-4000
5141
6000-8000
```

would result in ports 3000 to 4000, 5141 and 6000-800 being open for use by DCOM.

6. Enter the port ranges you wish to use for DCOM then select OK.
7. Create another registry value called `PortsInternetAvailable` inside this location of the type String Value. To do this, right-click in the right-hand pane and select New>String Value from the shortcut menu that appears and then enter `PortsInternetAvailable` to name the entry. It should show up in the list as the type `REG_SZ`.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1060

Copyright © 2000-2006 Pixel Power Ltd.
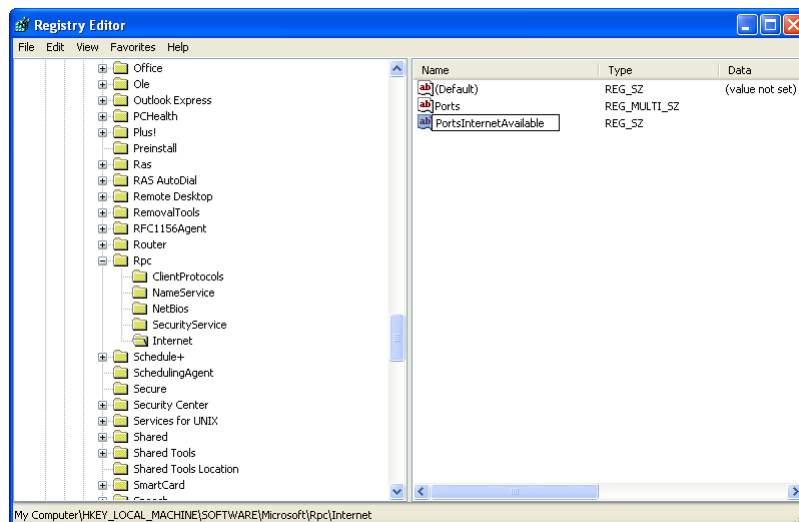
8.   Right-click on the `PortsInternetAvailable` entry and select Modify from the shortcut menu that appears. The Edit String dialog box appears.
9.   Enter a value of `Y` in the Value data text box.
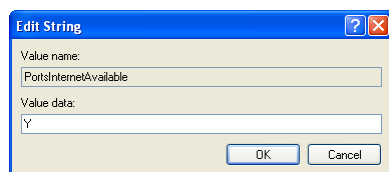
10.   Select OK to close the Edit String dialog box.
11.   Create a final registry value called `UseInternetPorts` inside this location, also of the type String Value. To do this, right-click in the right-hand pane and select New>String Value from the shortcut menu that appears and then enter `UseInternetPorts` to name the entry. It should show up in the list as the type `REG_SZ`.
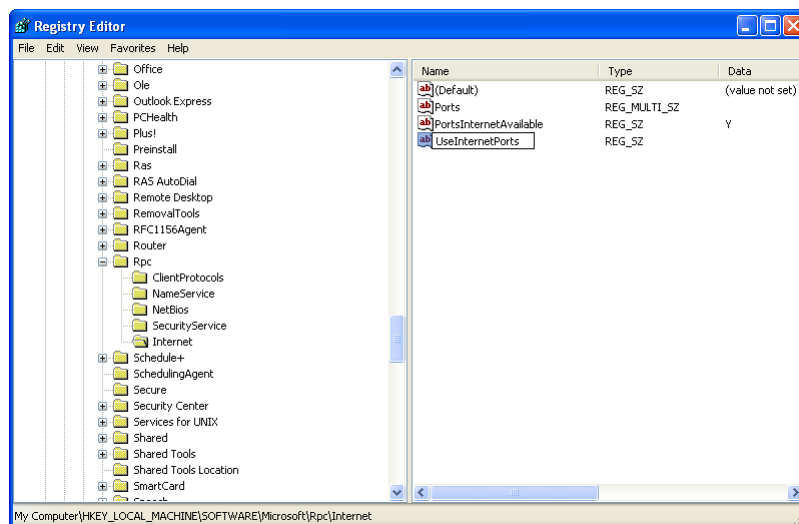
12.   Right-click on the `UseInternetPorts` entry and select Modify from the shortcut menu that appears. The Edit String dialog box appears.
13.   Enter a value of `Y` in the Value data text box.
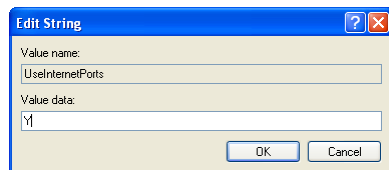
14. Select OK to close the Edit String dialog box.

Close the Registry Editor window to complete the process.

12.3.3 Enabling DCOM for software applications on REMOTE systems

This process should be completed on PC's and Clarity Servers in your workgroup that are running the application that you want the CG Tools application to communicate with. Please read Important information [1059] **before continuing.**

To enable remote access to software applications on remote systems e.g. Microsoft Excel, refer to the subsequent sections to make the necessary changes on the REMOTE machine (the machine being accessed remotely).

Ensure Microsoft Windows XP firewall is turned on [1062]
Add new port through firewall [1064]
Enable remote access to the desired application [1064]
Run DCOMCNFG [1065]
Configure COM security [1066]

12.3.3.1 Ensure Microsoft® Windows® XP firewall is turned on

Follow the steps below:

1. Select Start>Control Panel. The Control Panel is displayed (category view shown below; differs to optional classic).
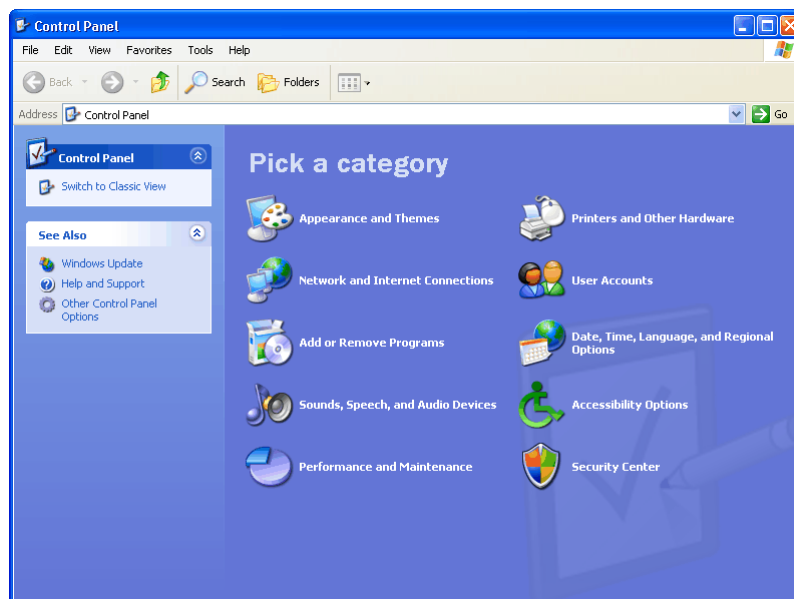
2. Select Security Centre. The Security Centre is displayed.

3. Select Windows Firewall. The Windows Firewall dialog box is displayed.
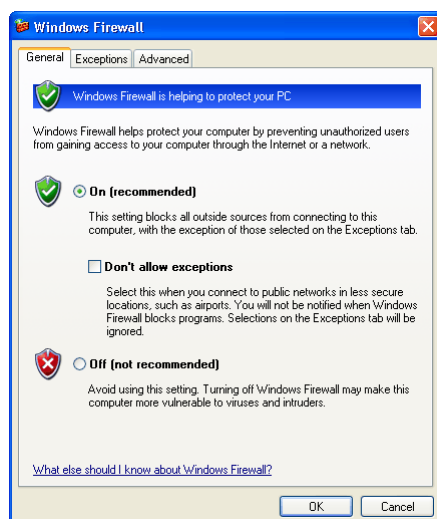
4. Ensure that the On box is checked.

12.3.3.2 Add new port through firewall

On the Windows Firewall dialog box:

1. Select the Exceptions dialog tab.
2. Select Add Port. The Add Port dialog box is displayed.
3. To enable incoming and outgoing DCOM network access, enter `DCOM` in the Name text box and `135` in the Port Number box.
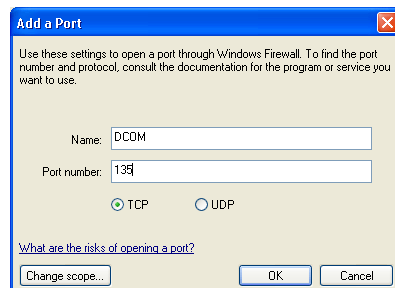
4. Select OK to close the Add Port dialog box.

This will add a new TCP/IP port 135 under the name DCOM.

12.3.3.3 Enable remote access to the desired application

Enable remote access to the program you wish to control (for example Microsoft Excel) by following the steps below:

1. With the Exceptions dialog tab still displayed, select Add Program. The Add Program dialog box is displayed.
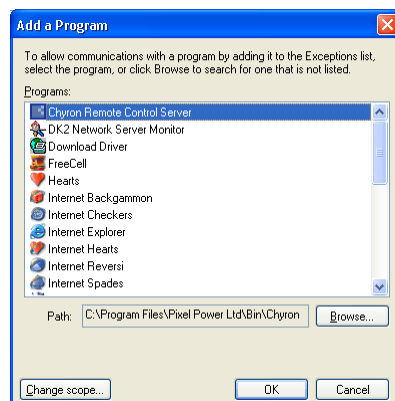
2. Select Browse and then locate the desired executable (.EXE) file e.g:

   `C:\Program Files\Microsoft Office\Office\Excel.exe`

3. Select OK to return to the Add Program dialog box.

4.   Select OK to return to the Windows Firewall dialog box.

The new `DCOM` service and `EXCEL.EXE` program are now present in the Programs and Services list box on the Exceptions dialog tab.

5.   Select OK to close the Windows Firewall dialog box.

12.3.3.4   Run DCOMCNFG

1.   Select Start>Run. The Run dialog box is displayed.
2.   Enter `DCOMCNFG` in the Open text box.
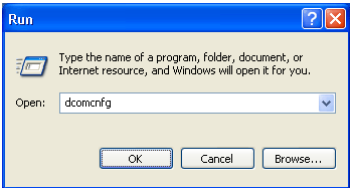
3.   Select OK. The Component Services dialog box is displayed.

12.3.3.5   Configure COM security

With the Component Services dialog box is displayed, follow the steps below:

1.   Select Console Root>Component Services>Computers>My Computer.
2.   Right-click on My Computer and select Properties from the shortcut menu that appears.
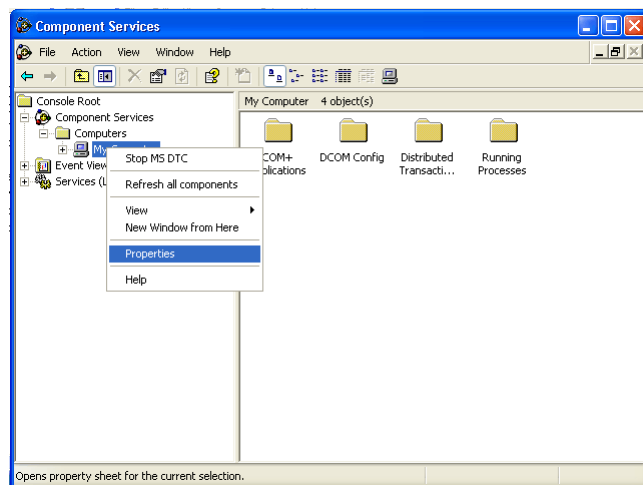
The My Computer Properties dialog box appears.

3.   Select the COM Security dialog tab to configure the default DCOM settings.
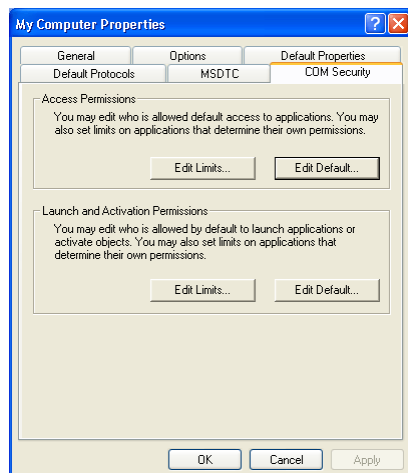
12. Appendices
DCOM configuration

12.3.3.5.1   Configure access permissions

With the COM Security dialog tab displayed, follow the steps below:

1.   Select Edit Limits in the Access Permissions group box. The Access Permission dialog box is displayed.
2.   If they are not already present in the Group or user name list box, select Add and then add the following users:

        ANONYMOUS LOGON
        Everyone

In the case of the ANONYMOUS LOGON user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Launch Permission dialog box.

3.   In the Permissions for <User> list box at the bottom of the Access Permission dialog box, ensure that the Local and Remote Access Allow boxes are checked for both the Anonymous and Everyone user types.

4.   Select OK to return to the My Computer Properties dialog box.

12.3.3.5.2   Configure launch and activation permissions

With the COM Security dialog tab displayed, follow the steps below:

1.   Select Edit Limits in the Launch and Activation Permissions group box. The Launch Permission dialog box is displayed.
2.   If they are not already present in the Group or user name list box, select Add and then add the following users:

        ANONYMOUS LOGON
        Everyone

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

In the case of the `ANONYMOUS LOGON` user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Launch Permission dialog box.

3. In the Permissions for <User> list box at the bottom of the Launch Permission dialog box, ensure that the Local Launch, Remote Launch, Local Activation and Remote Activation boxes are checked for both the `ANONYMOUS LOGON` and `Everyone` user types.

4. Select OK to return to the My Computer Properties dialog box.
5. Select OK to return to the Component Services dialog box.

12.3.4   Enabling DCOM for the CG Tools software application on HOST systems

This process must be completed on every Clarity Server in your workgroup to enable server configuration data to be transferred between each copy of the CG Tools software. Please read Important information [1059] **before continuing.**

To enable the CG Tools software application to make and receive DCOM calls to/from remote systems or other Clarity Servers, refer to the subsequent sections to make the necessary changes on the HOST machine (e.g. a Clarity system unit or Clarity Server).

Ensure Microsoft Windows XP firewall is turned on [1069]
Add new port through firewall [1070]
Enable remote access to the CG Tools application (CLARITY.EXE) [1071]
Run DCOMCNFG [1072]
Configure COM security [1073]
Customising permissions for the PCCollage ATL application [1075]

12.3.4.1 Ensure Microsoft® Windows® XP firewall is turned on

Follow the steps below:

1. Select Start>Control Panel. The Control Panel is displayed (category view shown below; differs to optional classic view).
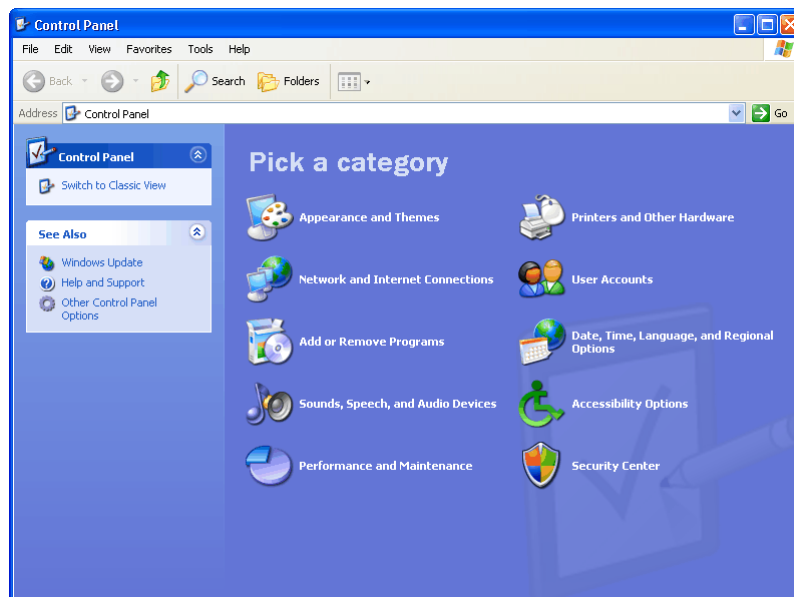
2. Select Security Centre. The Security Centre is displayed.

3. Select Windows Firewall. The Windows Firewall dialog box is displayed.
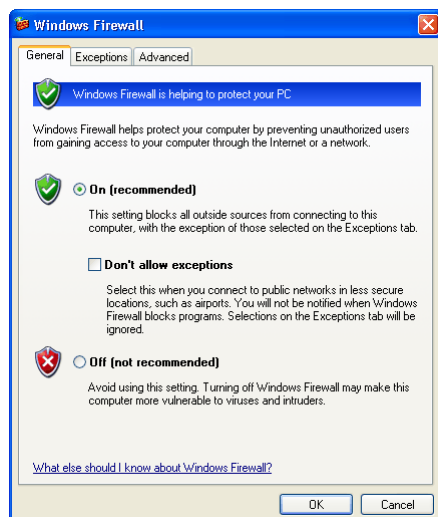
4. Ensure that the On box is checked.

12.3.4.2 Add new port through firewall

On the Windows Firewall dialog box:

1. Select the Exceptions dialog tab.
2. Select Add Port. The Add Port dialog box is displayed.
3. To enable incoming and outgoing DCOM network access, enter `DCOM` in the Name text box and `135` in the Port Number box.
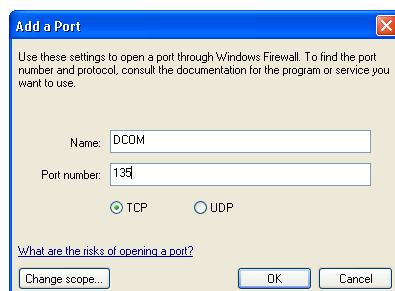
4. Select OK to close the Add Port dialog box.

This will add a new TCP/IP port 135 under the name DCOM.

12.3.4.3 Enable remote access to the CG Tools application (CLARITY.EXE)

Enable remote access to the CG Tools application by following the steps below:

1. With the Exceptions dialog tab still displayed, select Add Program. The Add Program dialog box is displayed.
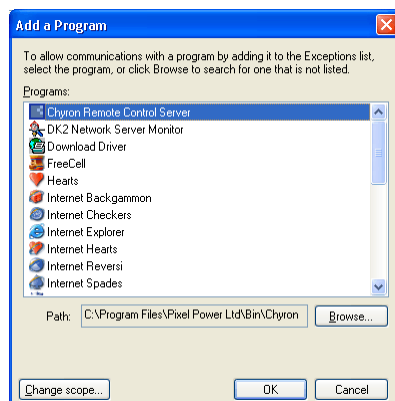
2. Select Browse and then locate the CG Tools executable (CLARITY.EXE) file e.g.:

   C:\Program Files\Pixel Power Ltd\CG Tools 7.1\Clarity.exe

3. Select OK to return to the Add Program dialog box.
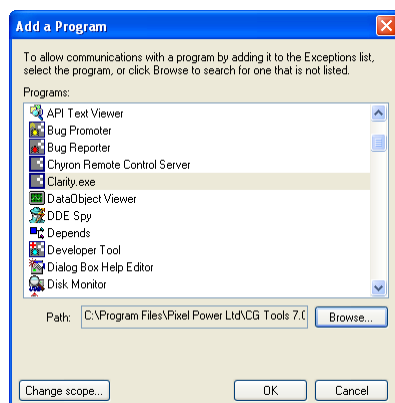
4. Select OK to return to the Windows Firewall dialog box.
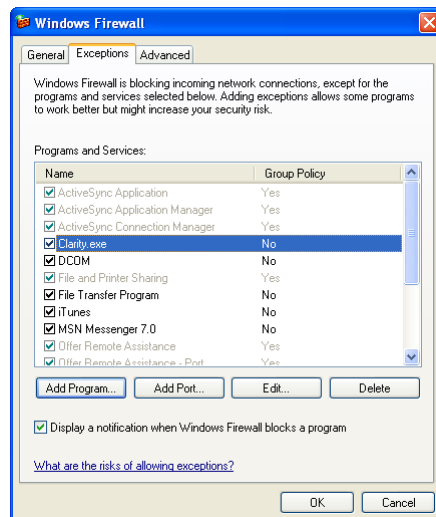
The new `DCOM` service and `CLARITY.EXE` program are now present in the Programs and Services list box on the Exceptions dialog tab.

5. Select OK to close the Windows Firewall dialog box.

12.3.4.4 Run DCOMCNFG

1. Select Start>Run. The Run dialog box is displayed.
2. Enter `DCOMCNFG` in the Open text box.

3. Select OK. The Component Services dialog box is displayed.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1072

Copyright © 2000-2006 Pixel Power Ltd.
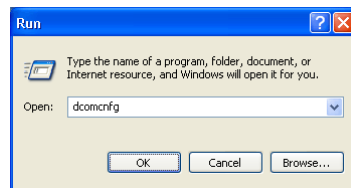
12.3.4.5 Configure COM security

With the Component Services dialog box is displayed, follow the steps below:

1. Select Console Root>Component Services>Computers>My Computer.
2. Right-click on My Computer and select Properties from the shortcut menu that appears.

The My Computer Properties dialog box appears.

3. Select the COM Security dialog tab to configure the default DCOM settings.

12.3.4.5.1 Configure access permissions

With the COM Security dialog tab displayed, follow the steps below:

1. Select Edit Limits in the Access Permissions group box. The Access Permission dialog box is displayed.
2. If they are not already present in the Group or user name list box, select Add and then add the following users:

```
ANONYMOUS LOGON
Everyone
```

In the case of the `ANONYMOUS LOGON` user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Access Permission dialog box.

3. In the Permissions for <User> list box at the bottom of the Access Permission dialog box, ensure that the Local and Remote Access Allow boxes are checked for both the `Anonymous` and `Everyone` user types.

4. Select OK to return to the My Computer Properties dialog box.

12.3.4.5.2   Configure launch and activation permissions

With the COM Security dialog tab displayed, follow the steps below:

1. Select Edit Limits in the Launch and Activation Permissions group box. The Launch Permission dialog box is displayed.
2. If they are not already present in the Group or user name list box, select Add and then add the following users:

```
ANONYMOUS LOGON
Everyone
```

In the case of the `ANONYMOUS LOGON` user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Launch Permission dialog box.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1074

Copyright © 2000-2006 Pixel Power Ltd.

3. In the Permissions for <User> list box at the bottom of the Launch Permission dialog box, ensure that the Local Launch, Remote Launch, Local Activation and Remote Activation boxes are checked for both the `ANONYMOUS LOGON` and `Everyone` user types.

4. Select OK to return to the My Computer Properties dialog box.
5. Select OK to return to the Component Services dialog box.

12.3.4.6   Customising permissions for the PCCollage_ATL application

With the Component Services dialog box displayed, follow the steps below:

1. Select Console Root>Component Services>Computers>My Computer>DCOM Config. A list of registered applications for the current system is shown.
2. Select the `PCCollage_ATL` application from the list.
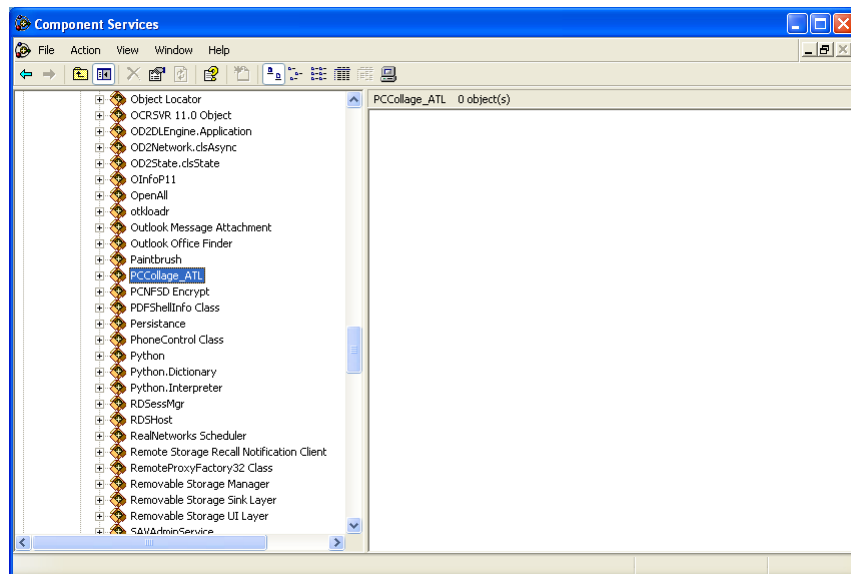
3. Right-click on `PCCollage_ATL` and select Properties from the shortcut menu that appears. The Properties dialog box is displayed.
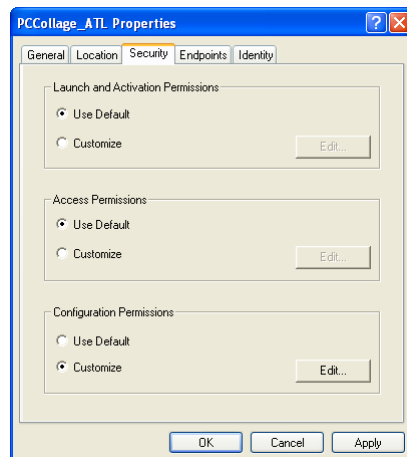
4. Select the Security dialog tab.

12.3.4.6.1   Configure launch and activation permissions

With the Security dialog tab displayed, follow the steps below:

1. In the Launch and Activation Permissions group box, ensure that the Customize option is selected and then select Edit. The Launch Permission dialog box is displayed.
2. If they are not already present in the Group or user name list box, select Add and then add the following users:

```
ANONYMOUS LOGON
Everyone
```

In the case of the `ANONYMOUS LOGON` user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Launch Permission dialog box.
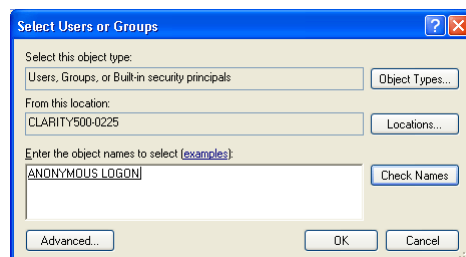
3. In the Permissions for <User> list box at the bottom of the Launch Permission dialog box, ensure that the Local Launch, Remote Launch, Local Activation and Remote Activation boxes are checked for both the `ANONYMOUS LOGON` and `Everyone` user types.
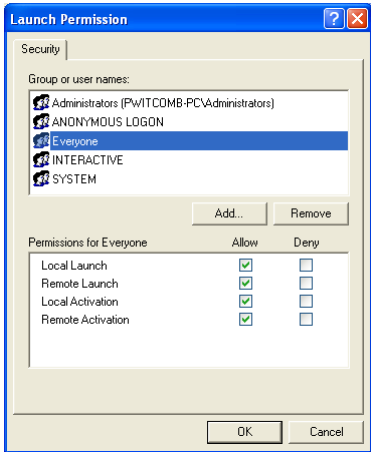
4. Select OK to return to the Properties dialog box.

12.3.4.6.2 Configure access permissions

With the Security dialog tab displayed, follow the steps below:

1. In the Access Permissions group box, ensure that the Customize option is selected and then select Edit. The Access Permission dialog box is displayed.
2. If they are not already present in the Group or user name list box, select Add and then add the following users:

    ```
    ANONYMOUS LOGON
    Everyone
    ```

    In the case of the `ANONYMOUS LOGON` user type, you may have to enter the user name manually and then select Check Names before selecting OK to return to the Access Permission dialog box.
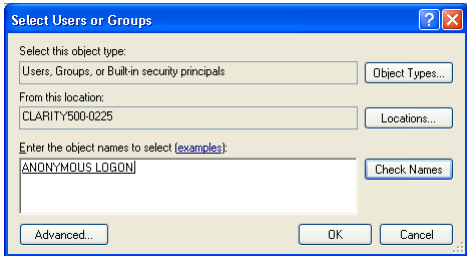
3. In the Permissions for <User> list box at the bottom of the Access Permission dialog box, ensure that the Local and Remote Access Allow boxes are checked for both the `Anonymous` and `Everyone` user types.
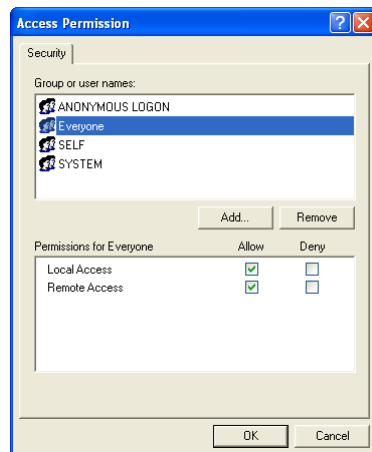
4. Select OK to return to the Properties dialog box.

12.3.4.6.3 Configure identity

With the Properties dialog box displayed, follow the steps below:

1. Select the Identity dialog tab and then ensure that the The interactive user option is selected.
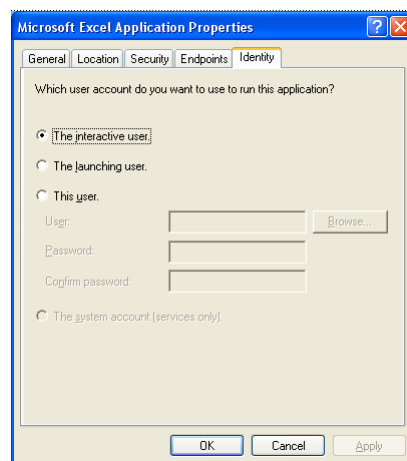
2. Select OK to close the Properties dialog box.
3. Close the Component Services dialog box and any other windows associated with the procedure that you have just completed.

12.4   Diagrams and images

12.4.1   Audio [CLARITY]

12.4.1.1   Audio delay schematic

12.4.1.2   Audio routing schematic (all SD systems)

Entire diagram represents routing available for a dual channel Clarity 500 SD system.
Grey areas indicate routing not available to single channel SD systems (e.g. Clarity 200).

12.4.1.3 Ducking schematics

12.4.1.3.1 Duck SOURCE Y while clip (SOURCE X) is playing
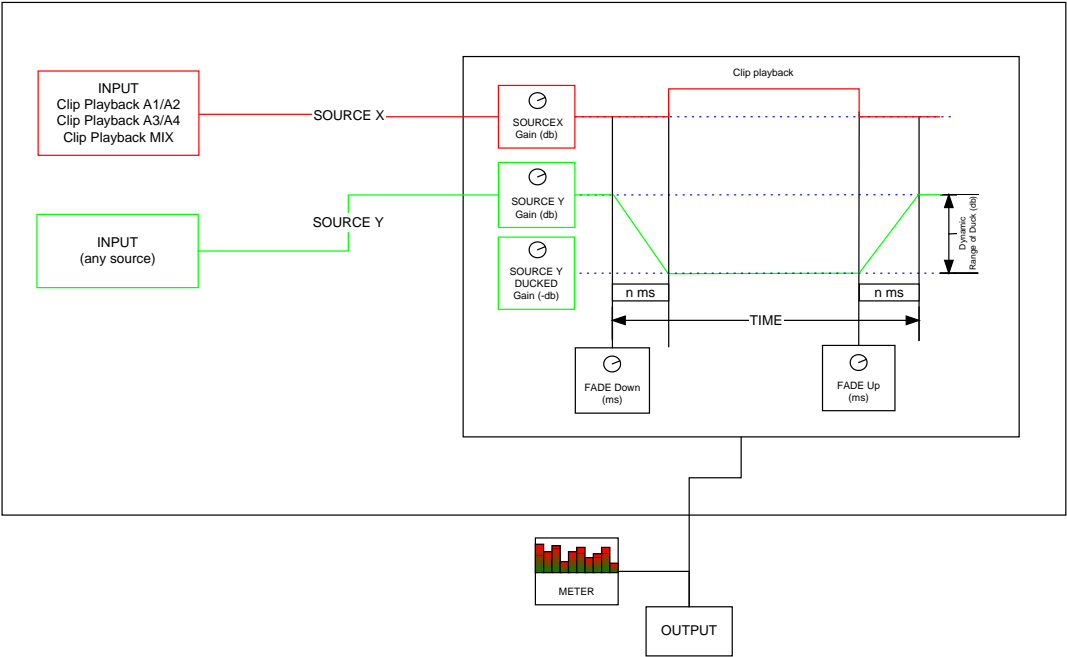
12.4.1.3.2 Duck SOURCE Y while clip (SOURCE X) is playing using SOURCE X level
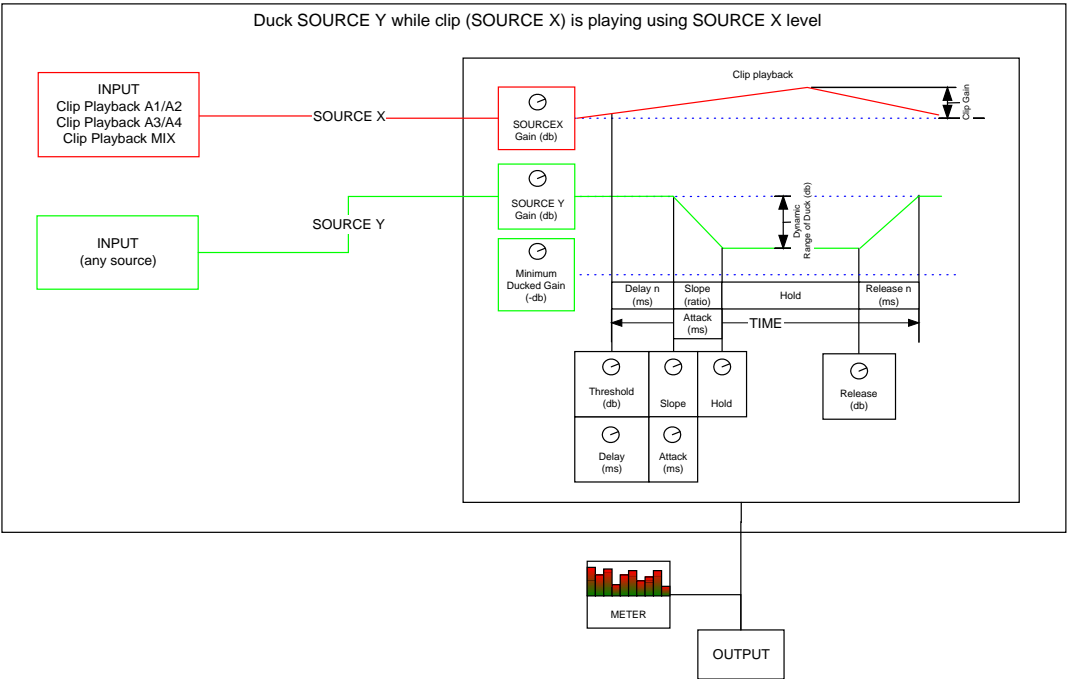
12.4.1.3.3   Reduction in SOURCE Y gain against SOURCE X level at any given point
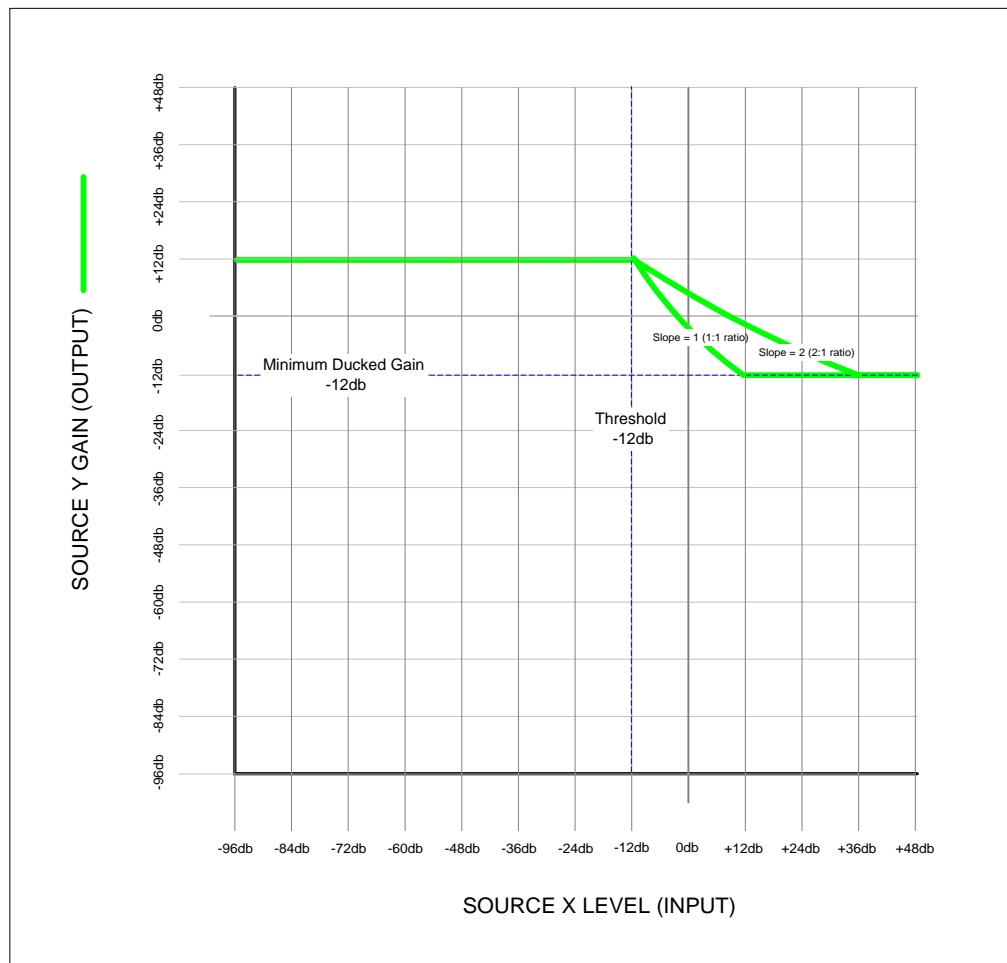
12. Appendices

Diagrams and images

12.4.1.3.4   Ducking parameters affecting SOURCE Y waveform over time
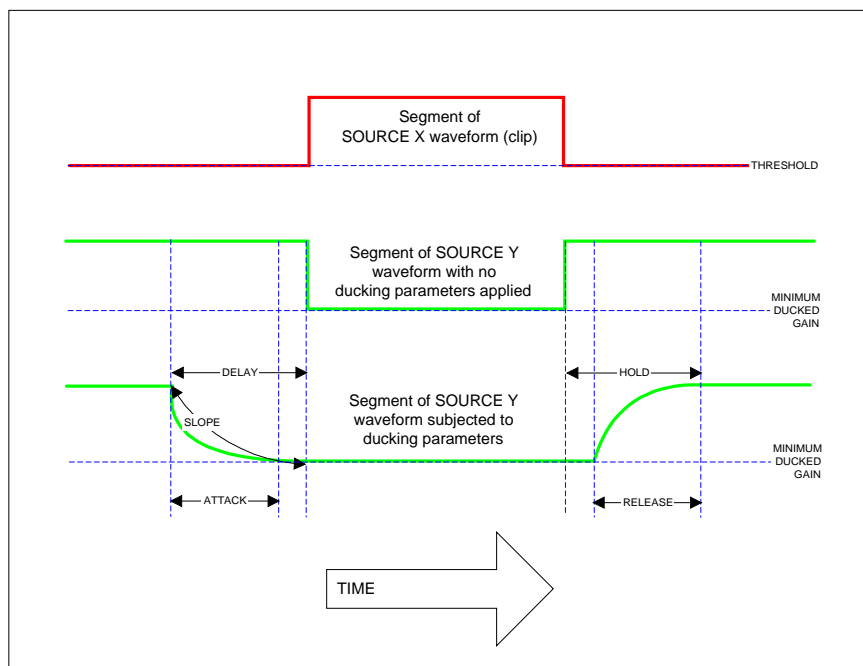
12.4.1.3.5   Mute SOURCE Y while clip (SOURCE X) is playing
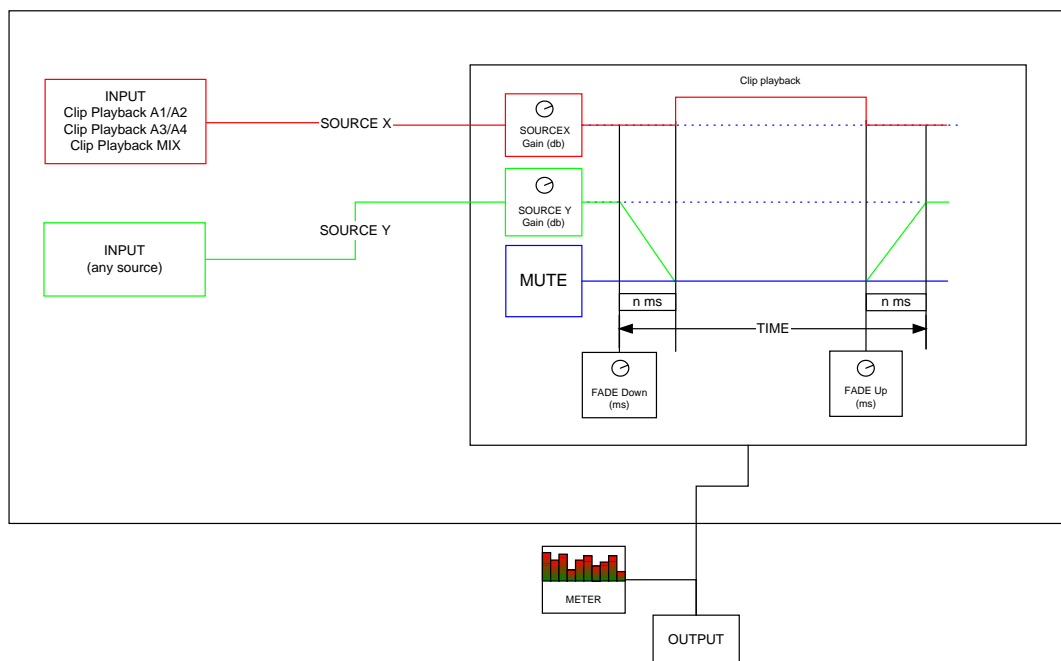
12.4.1.4   Mixing schematic
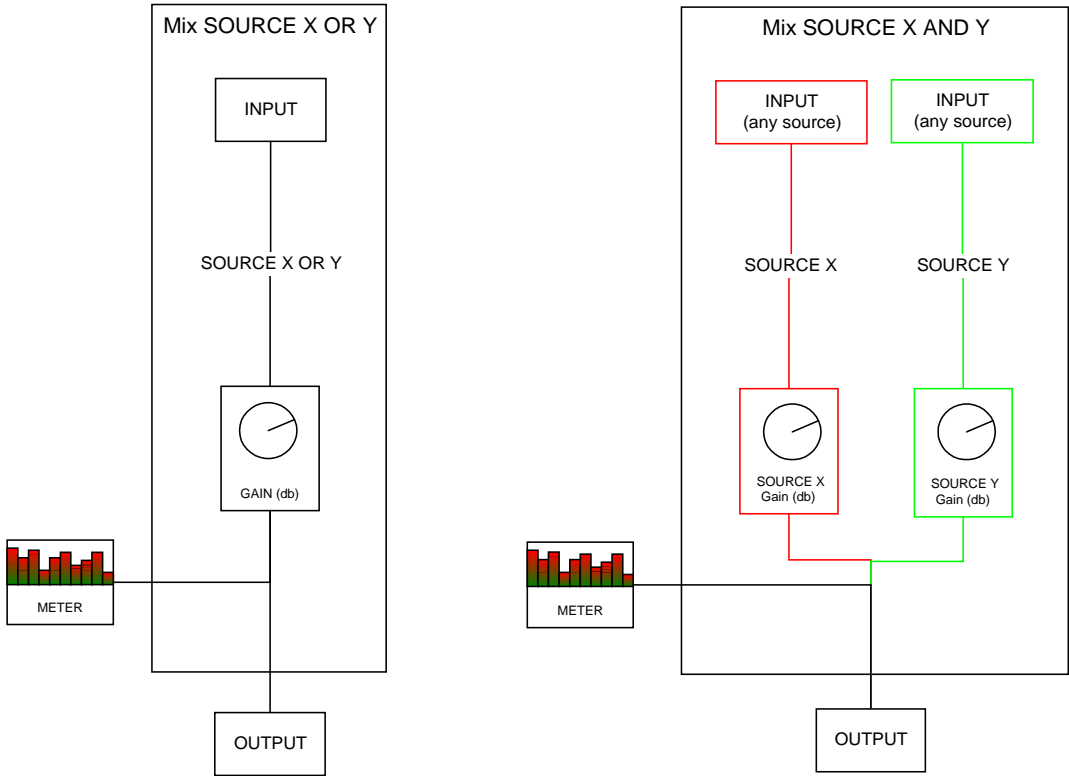
12.4.2   Clip Stores

12.4.2.1   Remote clip store

12.4.3   Data Stores

12.4.3.1   Simple instance of Data Store usage within Clarity template job
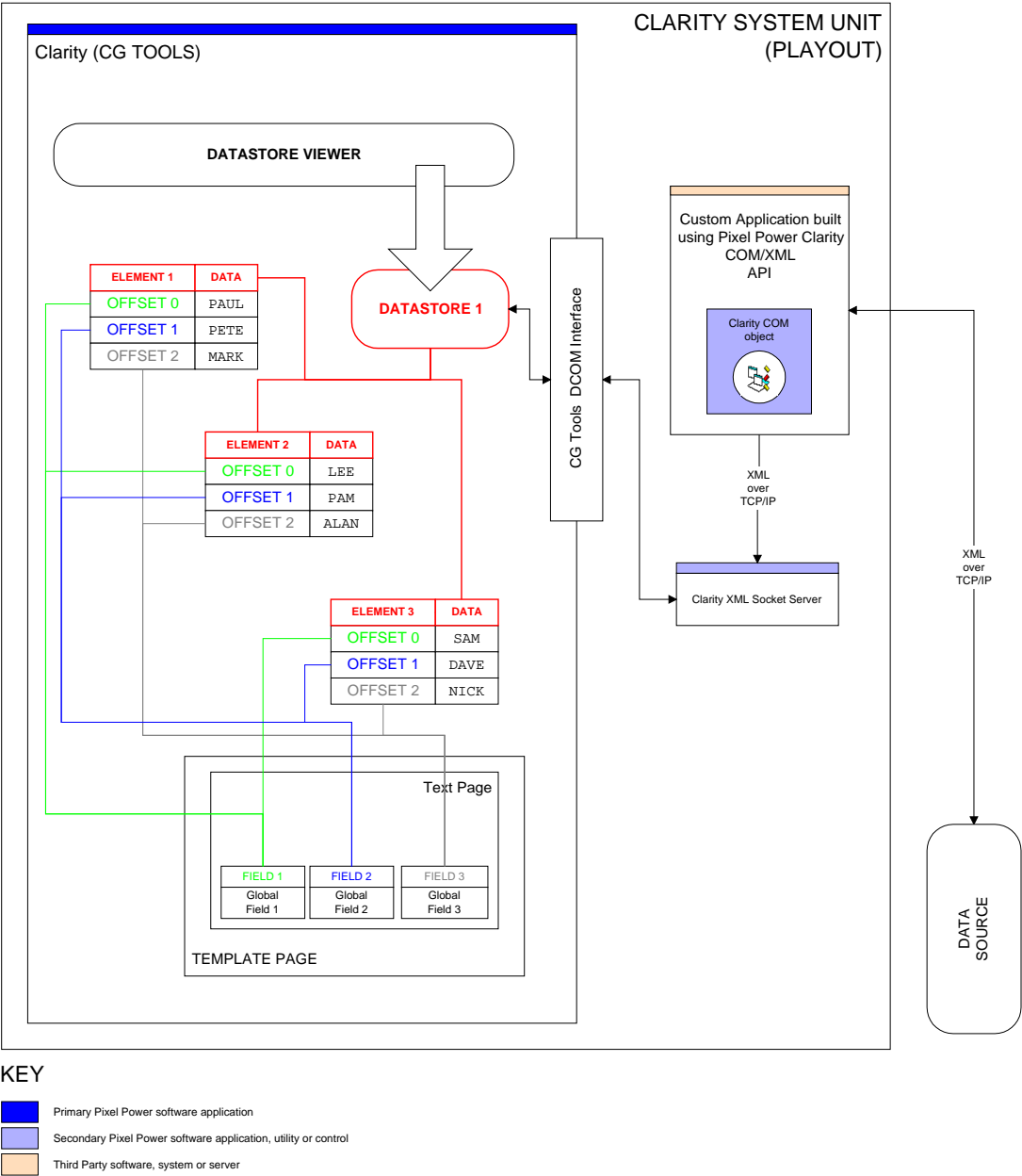
12.4.4   Video

12.4.4.1   Output video configurations

12.4.4.1.1   2 Video + 2 Key Inputs

Clarity 500 (Dual Channel SD) 2 Video + 2 Key Inputs
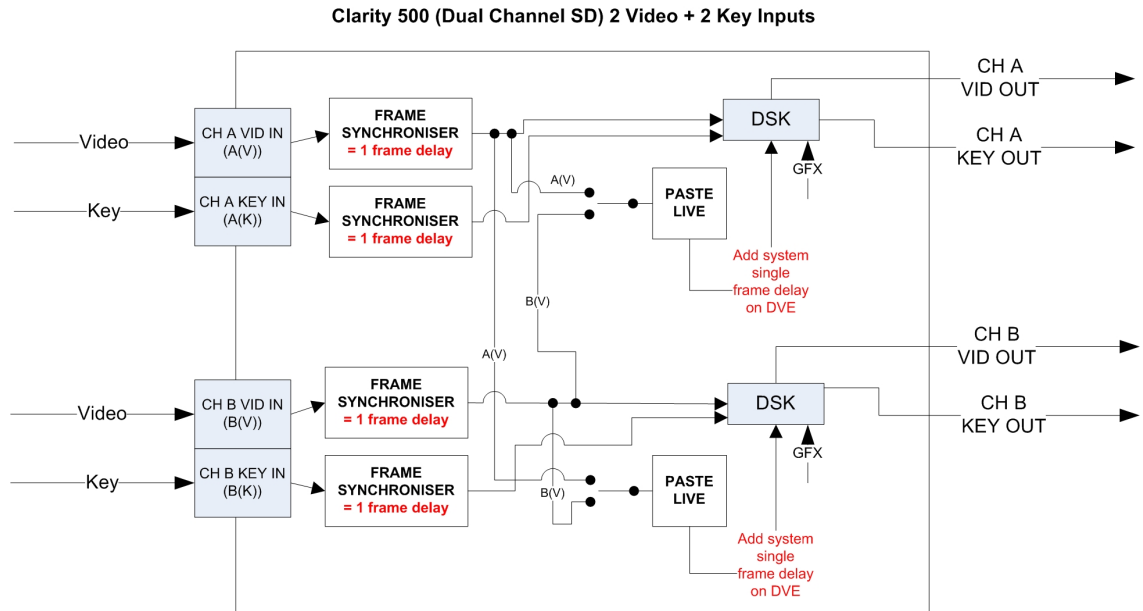
12.4.4.1.2   4 Video Inputs

Clarity 500 (Dual Channel SD) 4 Video Inputs

12.4.4.1.3   2 DSK Inputs + 2 DVE Inputs

Clarity 500 (Dual Channel SD) 2 DSK Inputs + 2 DVE Inputs
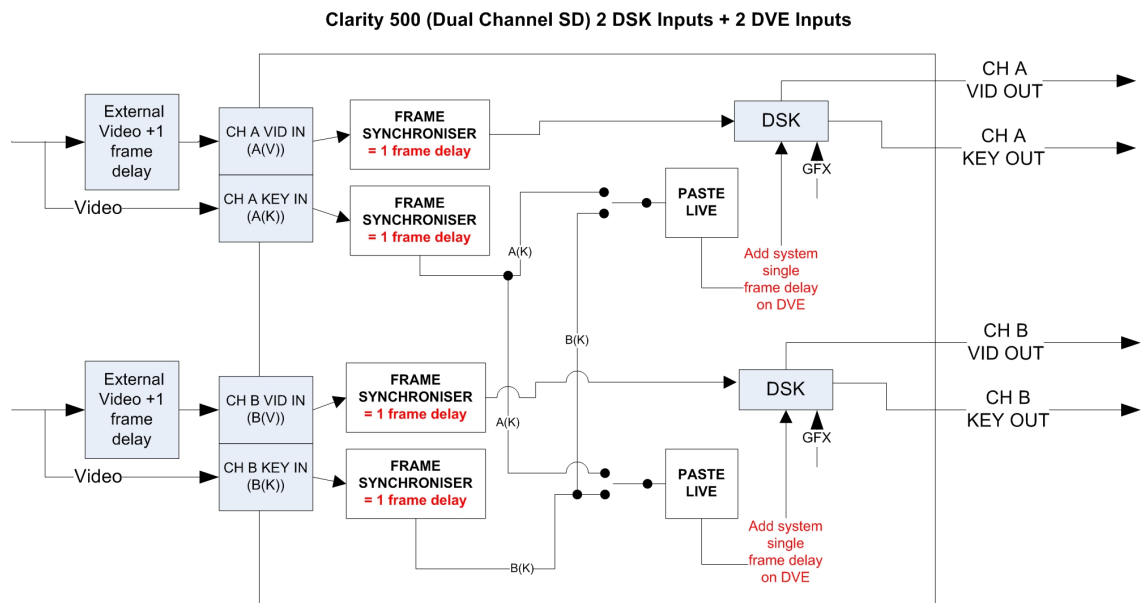
12.5   Error messages

Please select an area of functionality:

Area	Description
Video and image conversion [1088]	Errors when compiling, converting, importing and exporting image sequences and video clips.

NOTE

In all cases, please contact Pixel Power support [103] if you should require more information.

12.5.1   Video/audio/image conversion

Errors when compiling, importing and exporting image sequences and video clips. New or edited sections since the last release are highlighted with dark grey shading.

Area	Description
Apple® QuickTime® errors [1088]	Errors that may be experienced when QuickTime® is not installed or an old version of QuickTime is installed
General conversion errors [1088]	General errors that may be experienced when working with video/image file conversion.
Microsoft® DirectShow® based errors [1088]	Errors that may be experienced when working with features that utilise Microsoft® DirectShow®.
User based errors [1090]	Errors that may be experienced due to user intervention or invalid selection of source material.

12.5.1.1   Apple® QuickTime® errors

Errors that may be experienced when QuickTime® is not installed or an old version of Quicktime is installed

```
Conversion failed, failed to initialize QuickTime. Please ensure QuickTime is installed.
Conversion failed, failed to get QuickTime movie frame handle.
Failed to convert audio track.
```

12.5.1.2   General conversion errors

General errors that may be experienced when working with video/image file conversion.

```
Conversion failed, an undefined error occurred.
Conversion failed, unshaped video detected.
Conversion failed, cannot open destination file for writing.
Conversion failed, error loading AVI frame.
Conversion failed, error loading image sequence frame.
Conversion failed, incorrect image size.
Conversion failed, error writing frame.
Conversion failed, cannot crop/scale cel frame.
Conversion failed, unsupported source format.
Conversion failed, cannot open source file.
Failed to create target file, file already exists.
```

12.5.1.3   Microsoft® DirectShow® based errors

Microsoft® DirectShow® is an architecture for streaming media on the Microsoft Windows® platform. DirectShow provides for high-quality capture and playback of multimedia streams. It supports a wide variety of formats, including Advanced Systems Format (ASF), Motion Picture Experts Group (MPEG), Audio-Video Interleaved (AVI), MPEG Audio Layer-3 (MP3), and WAV sound files. It supports capture from digital and analog devices based on the Windows Driver Model (WDM) or Video for Windows. DirectShow is integrated with other DirectX technologies. It automatically detects and uses video and audio acceleration hardware when available, but also supports systems without acceleration hardware. DirectShow simplifies media playback, format conversion, and capture tasks. New or edited sections since

12. Appendices

the last release are highlighted with dark grey shading.

Area	Description
Command line errors [1089]	Errors that might occur when trying to use the PPAudioConvert [1056] and PPVideoConvert [1057] command line tools.
Filter errors [1089]	Error messages that might occur when connecting DirectShow® filters together.
General [1089]	General DirectShow® errors that might occur if Microsoft® DirectX® is not installed.
MainConcept MPEG codec errors [1090]	These errors can occur when trying to use the MainConcept MPEG encoder DirectShow® filter. Must have the MainConcept MPEG codec pack installed.
MXF errors [1090]	These errors can occur when trying to use the MainConcept MPEG codec DirectShow® filter.

12.5.1.3.1 Command line errors

These errors can occur when trying to use the PPAudioClip writing DirectShow® filter (PPAudioConvert [1056]). These are caused if the correct version of the `PPAudioConverterDll.dll` is not installed or registered.

```
Failed to create Clarity Audio Clip Writer.
Failed to add Clarity Audio Clip Writer to the graph.
Failed to get Clarity Audio Clip Writer interface.
```

These errors can occur when trying to use the PPVideoClip writing DirectShow® filter (PPVideoConvert [1057]). These are caused if the correct version of the `ClarityDSFilters.ax` (installed with CG Tools software) is not installed or registered.

```
Failed to add Clarity Video Clip Writer to the graph.
Failed to get Clarity Video Clip Writer interface.
Failed to create Clarity Video Clip Writer filter.
```

12.5.1.3.2 Filter errors

Error messages that might occur when connecting DirectShow® filters together. Possibly due to unsupported video/audio formats, meaning that the correct codec is not installed.

```
Failed to connect pins.
Failed to connect source filter to resize filter.
Failed to connect resize filter to MPEG encoder filter.
Failed to connect MPEG encoder filter to file writer filter.
Failed to connect MXF source filter to MXF Parser filter.
Failed to connect essence pin to resize filter.
Failed to connect resize filter to writer filter.
Failed to connect essence pin to writer filter.
Failed to connect MPEG encoder filter to MXF MUX filter.
Failed to connect source filter to MXF MUX filter.
Failed to connect MXF MUX filter to file write filter.
```

12.5.1.3.3 General

General DirectShow® errors that might occur if Microsoft® DirectX® is not installed.

```
Cannot initialize COM, CoInitialize failed.
Failed to get Media Seeking interface.
Failed to get Filesync interface.
Failed to obtain IMediaEvent interface.
Failed to obtain IMediaControl interface.
Failed to create IGraphBuilder instance.
Failed to create file writer filter.
Failed to add file writer filter to the graph.
```

DirectShow® error, possibly caused if the correct codec is not installed.

```
Failed to render the DirectShow Filter Graph.
```

12.5.1.3.4   MainConcept MPEG codec errors

Refer to [MXF Export and MPEG-2 Type D-10 (SMPTE 356M) support](527) for more information.

These errors can occur when trying to use the MainConcept MPEG encoder DirectShow® filter. You must have the MainConcept MPEG codec installed. This is installed as part of the [MXF Plugin [LICENSED]](26) option.

```
Failed to create file writing filter.
Failed to get file writing interface.
Failed to add file writer to the graph.
Failed to create the MPEG encoder filter.
Failed to get the MPEG encoder interface.
Failed to add the MPEG encoder to the graph.
```

These errors can occur when trying to use the Resizing DirectShow® filter. The resizing filter is used to crop the D10 video from 720x608 to 720x576. If the pack is not installed and/or registered correctly, then these errors can occur.

```
Failed to create Video Resize Filter.
Failed to add Video Resize Filter to the graph.
Failed to get Video Resize Filter interface.
Failed to find essence pin.
```

12.5.1.3.5   MXF errors

DirectShow® MXF errors, meaning that the Snell and Wilcox filter is not installed and/or registered correctly.

```
Failed to create SnellWilcoxMXFParser instance.
Failed to create SnellWilcoxMXFMux instance.
Failed to add MXF MUX filter to the graph. Failed to add MXF Parser filter to the graph.
Failed to create MXF source filter.
```

Displayed when converting PPV's and PPA's to MXF format if the `ClarityDSFilters.ax` (installed with CG Tools software) is not installed and/or registered correctly.

```
Failed to create the Audio Reader filter.
Failed to create the PPVideo Reader source filter.
```

12.5.1.4   User based errors

Errors that may be experienced due to user intervention or invalid selection of source material.

```
User aborted.
Failed to convert, source clip is a video browse clip.
```

Section 13

Examples

<table>
<tr><td colspan="3">

13.   Examples

</td></tr>
</table>

The following examples are available:

Audio

Title	Description
Duck Y while clip is playing on X [1095]	Used primarily for voice over's for TV commercials. For instance if you want the background music to be reduced while the announcer is speaking then ducking is a way to do this. In essence ducking is the dynamic control of a signal using a second signal. SOURCE Y audio is faded down or muted, kept at a predefined level whilst SOURCE X audio (clip) is active and then faded back in once SOURCE X audio (clip) is finished.

Clocks

Title	Description
Creating a countdown clock effect using field markers and scripting [1100]	This type of clock would often be used when counting down to a special event or sporting occasion i.e. the Olympics or soccer World Cup.

Playout control

Title	Description
Controlling playout using VITC or LTC timecode sources (non-VTR) [CLARITY] [1108]	In certain environments, it is often required to playout certain pages at a specific time of day automatically from a master playout Clarity system. The best way to accomplish this to assign timecodes to these specific pages and connect the master playout Clarity system to a master time clock source.

Effects

Title	Description
Complex masked squeezeback creditroller/promo [1116]	The effect that was required was to display a full screen credit roller clip/live B feed, say at the end of a programme. Part way through the credit roller, the clip/live B feed needed to be moved and down sized, providing less emphasis while at the same time, the background live video A promo feed should increase in size to provide more emphasis. At this point a voice over was to be run, describing the promo. After the voice over had finished, the reverse was to occur. The credit roller clip/live B feed needed to be moved and up sized back to full screen, providing total emphasis, while at the same time, the background live video A promo feed was to disappear.

13. Examples

13.1　Audio [CLARITY]

13.1.1　Ducking

Used primarily for voice over's for TV commercials. For instance if you want the background music to be reduced while the announcer is speaking then ducking is a way to do this. In essence ducking is the dynamic control of a signal using a second signal.

13.1.1.1　Duck Y while clip is playing on X

SOURCE Y audio is faded down or muted, kept at a predefined level whilst SOURCE X audio (clip) is active and then faded back in once SOURCE X audio (clip) is finished.
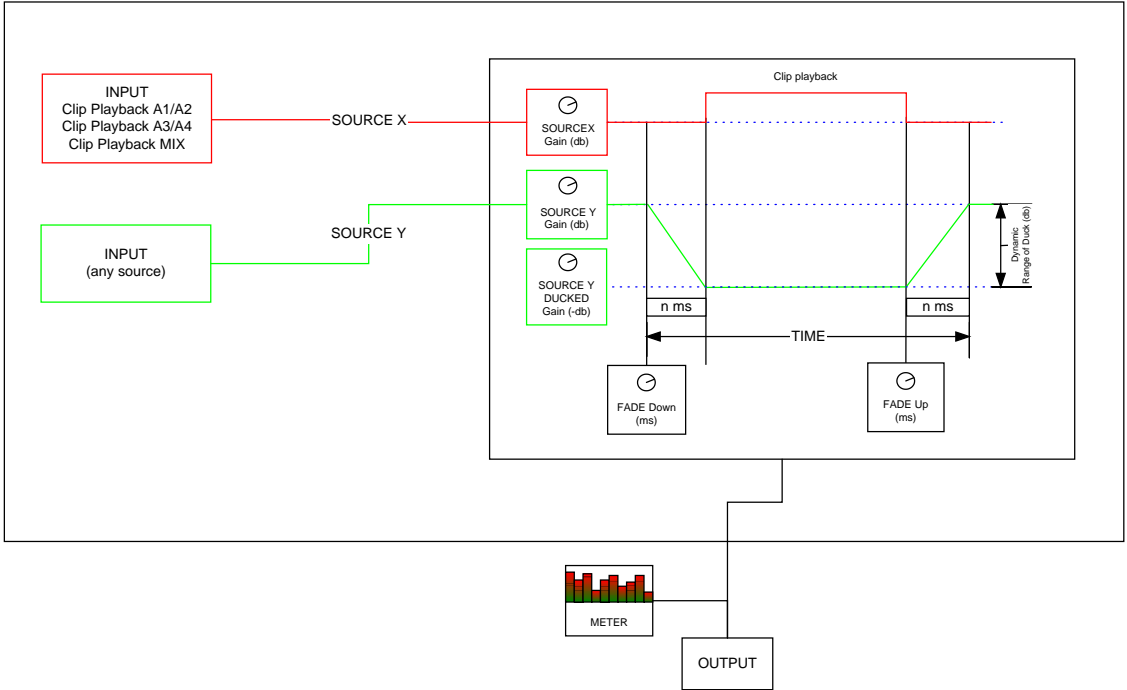
13.1.1.1.1　Overview

In this example:

- SOURCE Y is an embedded audio stream. This could be a music track.
- SOURCE X is an audio clip (e.g. voice over) that is associated with a page. It could also be voice over audio associated with a video clip. For this example, we have described the use of an audio clip in the popular MP3 format.

The software will be configured and a job created that will demonstrate how voice over audio associated to a page background can mute or reduce the volume of an embedded audio source.

13.1.1.1.2　Hardware requirements and configuration

You will need to connect the following:

Description	Channel	Connector (Type)	Purpose
INPUT video + embedded audio source connected to	A	VID IN (BNC)	Supplies video and an embedded audio stream which will be ducked whilst audio associated with a page is playing. This stream MUST contain embedded audio. For this example, embedded audio is located on GROUP 1.

Description	Channel	Connector (Type)	Purpose
LOCAL monitoring speakers connected to	A	ANALOGUE MONITOR (PHONO)	Enables the ducking effect to monitored locally.
OUTPUT CG + video + embedded audio connected from	A	VID OUT (BNC)	Outputs the CG output from the system + the embedded audio featuring the ducking effect.

Please ensure that the system DSK for channel A has been configured to pass through embedded data. This can be achieved using the DSK A dialog tab ⌐792⌐ on the SD Hardware Configuration dialog box ⌐786⌐ (Options> ⌐429⌐ Hardware>SD Settings ⌐431⌐).

You will also need an example audio clip. For this example, we have described the use of a clip in the popular MP3 format.

Once the connections have been made, please ensure that input video + embedded audio source is started and embedded audio is present. This will help during the software audio configuration ⌐1096⌐ described later in this example. The presence of embedded audio will also be confirmed later on in this example.

13.1.1.1.3   Software audio configuration

Follow the steps below to configure software audio settings:

1. Start the Clarity software.
2. Select Options> ⌐429⌐ Preferences>Local Preferences ⌐430⌐. The Local Preferences dialog box ⌐696⌐ is displayed.
3. Select the Audio dialog tab.
4. Select the Chan A I/O sub-tab ⌐697⌐.

Configure the settings as shown below:
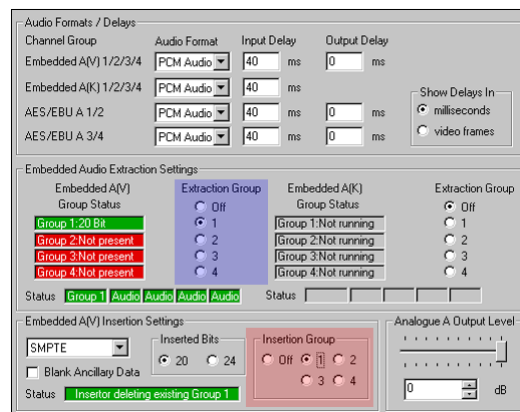
The presence of embedded audio for the Embedded A(V) input is shown by the green indications.

5. Ensure that embedded audio is extracted from the input video by selecting 1 in the Embedded Audio Extraction Settings group box (blue shaded area).
6. Ensure that embedded audio is re-inserted into the output video by selecting 1 in the Embedded A(V) Insertion Settings group box (red shaded area).
7. Select the Chan A Routing sub-tab ⌐699⌐.

The Chan A Routing sub-tab is displayed showing the default settings.
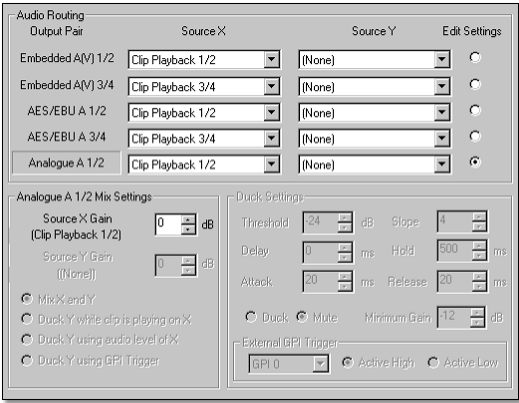
8.   Configure the settings as shown below:
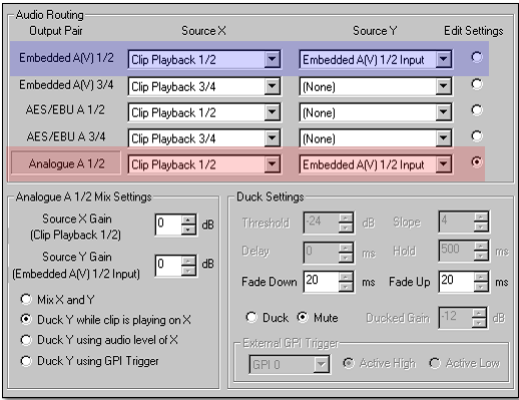
At some point during the configuration shown above, you should begin to hear the embedded audio.

The same ducking settings should be mirrored for both the EMBEDDED A(V) 1/2 output pair (blue shaded area) and the ANALOGUE A 1/2 output pair (red shaded area) so that the effect can be monitored locally as well as being output with the output video stream.

With these settings, when the page is played out, audio associated with the page will begin and the embedded audio will be muted. After the audio associated with the page has completed playback, it will stop and the embedded audio will return to its original volume.

If the live audio needs to be partially heard whilst audio associated with the page is playing, select the Duck option and then configure the Ducked Gain increment box to alter the volume level of the ducked audio.

Adjust the values in the Fade Down and Fade Up increment boxes to reduce the harshness of the changeover between audio associated with the page and the embedded live audio.

13.1.1.1.4   Copy audio clip

Follow the steps below to copy and convert an audio clip:

1.   Select File> ⌐378¬Clarity Explorer ⌐382¬ to display the Clarity Explorer.
2.   Create a new folder on the local clip drive and rename the folder name to AUDIO.
3.   Browse to the location on your network or removable drive where the source audio file is located.
4.   Copy the audio clip to the AUDIO folder on the local clip drive.

    Files are automatically converted from their native format e.g. MP3 to the Clarity format during the copy.
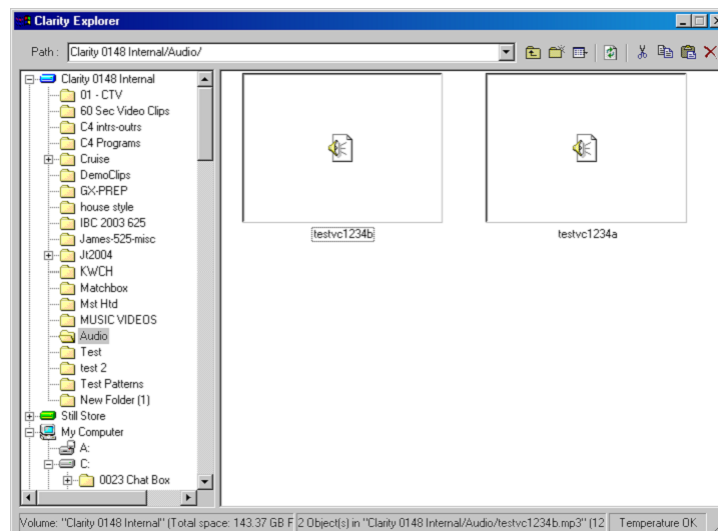
5. Close the Clarity Explorer.

13.1.1.1.5 Display relevant audio meters

Follow the steps below to display the necessary audio meters:

1. Select View> 421 Audio Meters 423 to display the Audio Meters.
2. Right-click on the Audio Output Meters and ensure that the following output audio meters are displayed using the shortcut menu:

Embedded A(V) 1
Analogue A1/A2
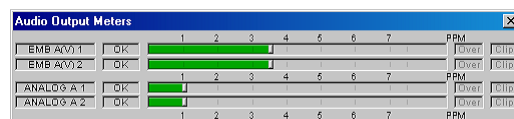
3. Right-click on the Audio Input Meters, and ensure that the following input audio meters are displayed using the shortcut menu:

Embedded A(V) 1
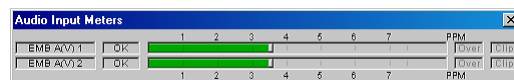
13.1.1.1.6 Create an example job

Follow the steps below to create an example job:

1. Select File> 378 New Job 379 . A new job is opened.
2. Select Page> 390 Edit Graphics 392 to open Page 1 in Graphic Edit window 260 .
3. Select Page> 390 Change Background 392 to edit the background settings for page 1. The Page Settings dialog box 751 is displayed.
4. Select the Audio dialog tab 752 .
5. Click on Select. The Clarity Explorer is displayed.
6. Browse to the AUDIO folder created in the steps earlier 1097 , then select the audio clip.

7. Select OK. You are reverted back to the Page Settings dialog box.
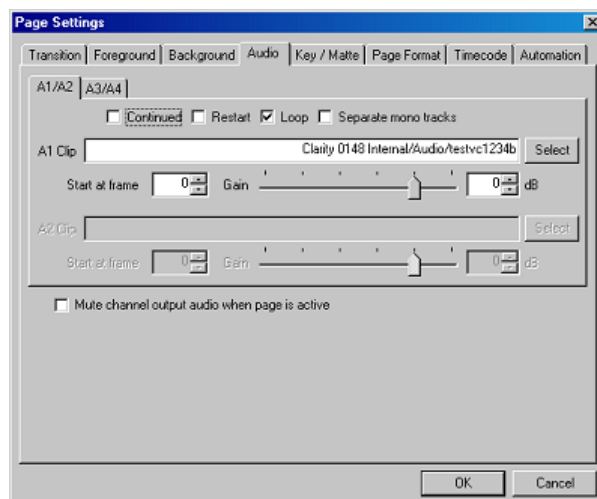
8. Adjust the gain settings as desired using the Gain slider (we recommend setting the maximum gain to begin with i.e +12db).
9. Select OK to close the Page Settings dialog box.
10. Close the Graphic Edit window.

13.1.1.1.7 Playout the example job

Please ensure that the input video and embedded live audio source is playing before going online.

Follow the steps below to playout the job and hear the ducking effect.

1. Ensure that the Playout Controls [343] are displayed by selecting View> [421] Playout Controls [424].
2. Check the Online box on the Playout Controls to put the Clarity system online.
3. Press Take to cue and then take page 1.

As soon as audio is output from the audio clip associated with page 1, the embedded audio is muted or ducked until audio clip playback is complete. Refer to the displayed audio meters [1098] for a visual representation of this.

13.2 Clocks

13.2.1 Creating a countdown clock effect using page template fields and scripting

In order to fulfill the requirement for a clock to countdown from a certain time back to 00:00:00:00 (days, hours, minutes and seconds), we have implemented the ability to create a clock of this type using a combination of text pages, animation markers, page template field markers and a controlling Visual Basic script. This type of clock could be used when counting down to a special event or sporting occasion i.e. the Olympics or soccer World Cup.

SEE ALSO

13.2.1.1 Overview

This example features four individual clock components (days, hours, minutes and seconds). Each clock component consists of a text page to which an animation marker and a page template field marker is applied. Each animation marker is configured as a static move and with a loop interval of one second. The final page template field marker attached to the fourth clock component is attached to a Visual Basic script. The field ID's must be consecutive and match those specified in the Visual Basic script.
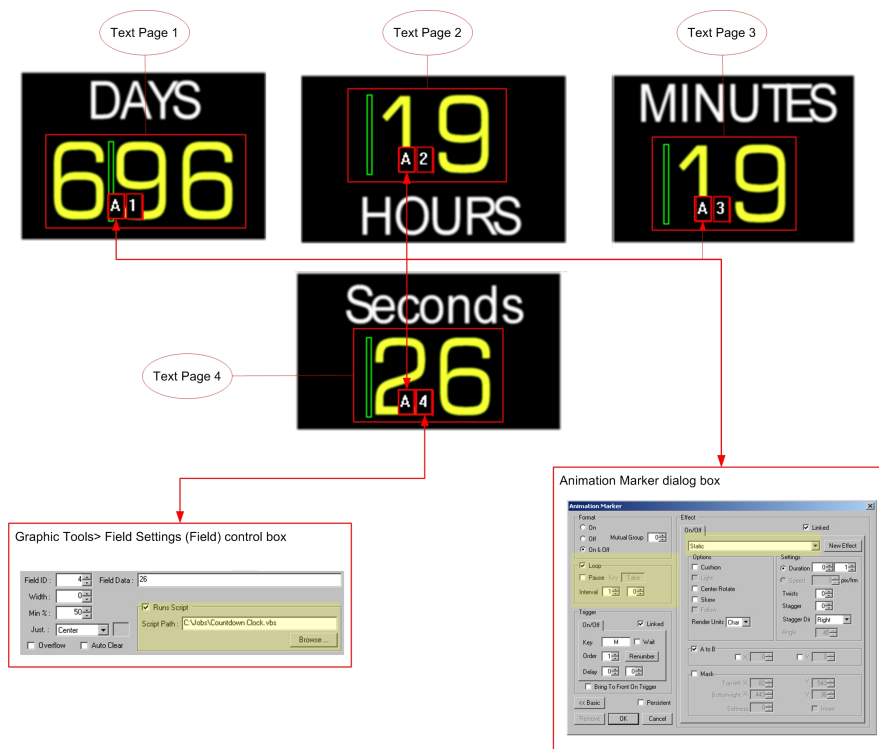
Refer to the following sections to complete this example:

13.2.1.2   **Obtain or copy example Visual Basic script**

To create a valid Visual Basic script, you can either copy the script shown below to a .VBS file or request a file from Pixel Power technical support. Save or copy the script to a known location on the host Clarity system unit e.g. `C:\Jobs\Scripts\Countdown_Clock.vbs`.

```
'=================================================================================
'Countdown Clock
'=================================================================================
'This script counts down to a specified time and date.
'
'Because the update of the online display is linked to the video clock rather
'than the system clock we don't use the time returned by the system directly.
'Instead we decrement the last displayed time by a second each time the script
'is run. If this time ever gets out of step with the system time by more than
'the specified margin of error (for example because the page has been offline)
'then we re-set the display time from the system clock.
'
'The script needs to know the page number that the clock is on and the field ID
'of each element. The field for seconds should be set to use this script.
'
'All four elements should have a looping static animation with a 1 second loop
'delay should be used to update the text from the script every second.
'=================================================================================

Option Explicit

Function TextFieldScript (bstrJobPath, nPageNumber, nChannel, bstrDateTime, bstrFieldID,
bstrFieldData)

  'Set up field ID for each of the time elements.
  Dim DaysFieldID, HoursFieldID, MinutesFieldID, SecondsFieldID
  DaysFieldID = 1
  HoursFieldID = 2
  MinutesFieldID = 3
  SecondsFieldID = 4

        'Set up target date and time.
        Dim TargetDate
        TargetDate = DateValue("December 24, 2005")
        TargetDate = (TargetDate + TimeValue("11:00:00 AM"))

  'Initialise the Days, Hours and Minutes variables – this also ensures they are treated
as numeric.
  Dim FieldData, Days, Hours, Minutes, Seconds
  FieldData = ""
  Days = 0
  Hours = 0
  Minutes = 0
  Seconds = 0

        'Get the days from field 1.
        Call GetFieldData(nPageNumber, DaysFieldID, FieldData)
        If IsNumeric(FieldData) Then
                Days = CInt(FieldData)
        End If

        'Get the hours from field 2.
        Call GetFieldData(nPageNumber, HoursFieldID, FieldData)
        If IsNumeric(FieldData) Then
    Hours = CInt(FieldData)
  End If

        'Get the minutes from field 3.
        Call GetFieldData(nPageNumber, MinutesFieldID, FieldData)
        If IsNumeric(FieldData) Then
    Minutes = CInt(FieldData)
  End If

        'Get the seconds – because the script is attached to the seconds field (4) we
can just use the field data passed in.
        If IsNumeric(bstrFieldData) Then
    Seconds = CInt(bstrFieldData)
  End If
```

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1102

Copyright © 2000-2006 Pixel Power Ltd.

```
        'Get The current Time
        Dim CurrentDate
  CurrentDate = (Date + Time)

        'Check if we need to perform a correction.
        Dim RealDiff, TotalSeconds
        RealDiff = DateDiff("s", CurrentDate, TargetDate)
        TotalSeconds = (Seconds + 60 * (Minutes + (60 * (Hours + (Days * 24)))))

        'Allow an error of 5 seconds either way before we correct.
        If (RealDiff > (TotalSeconds + 5)) Or (RealDiff < (TotalSeconds - 5)) Then
                Days = RealDiff \ 86400
                RealDiff = (RealDiff Mod 86400)
                Hours = RealDiff \ 3600
                RealDiff = RealDiff Mod 3600
                Minutes = RealDiff \ 60
                RealDiff = RealDiff Mod 60
                Seconds = RealDiff
        Else
                'Tick down one second.
                If Seconds > 0 Then
                        Seconds = (Seconds - 1)
                ElseIf Minutes > 0 Then
                        Minutes = (Minutes - 1)
                        Seconds = 59
                ElseIf Hours > 0 Then
                        Hours = (Hours - 1)
                        Minutes = 59
                        Seconds = 59
                ElseIf Days > 0 Then
                        Days = (Days - 1)
                        Hours = 23
                        Minutes = 59
                        Seconds = 59
                End If
        End If

        'Assemble the display string for each time element, adding lead zeros as
required.
        Dim DayString, HourString, MinuteString, SecondString

        'Currently we don't display leading zeros for days and hours.
        DayString = CStr(Days)
  HourString = CStr(Hours)

  'But we do for
  If(Minutes < 10) Then
    MinuteString = ("0" & CStr(Minutes))
  Else
    MinuteString = CStr(Minutes)
  End If

  If(Seconds < 10) Then
    SecondString = ("0" & CStr(Seconds))
  Else
    SecondString = CStr(Seconds)
  End If

        'Update the Days, Hours and Minutes fields.
        Call UpdateField(nPageNumber, DaysFieldID, DayString)
        Call UpdateField(nPageNumber, HoursFieldID, HourString)
        Call UpdateField(nPageNumber, MinutesFieldID, MinuteString)

        'The Seconds field gets set by the output of this script so set that now.
        TextFieldScript = SecondString

End Function
```

13.2.1.3   Create individual clock components using text pages and format if desired

Follow the steps below to create a page containing the four text pages that will form the basis of your countdown clock:

1. Start the Clarity software.
2. Open page 1 for editing in the Graphic Edit window 260.
3. Create four text pages using the Text> 408 Text Page 410 command and position them as desired on the page where you want your clock components to appear. Press ESC at any time to stop editing the current text page.
4. Enter some numerical characters within each text page so that you can work out the correct positioning for each component. This also enables the text to be formatted using the Graphic Tools 266.
5. Text pages can be selected using the Page 190 RapidAction key and positioned using the Left CTRL + Left ALT + Arrow keys.

The example below features text pages that are styled with reasonably large text. The text is highlighted using contrasting black rectangles. Additional text pages have been added for each clock annotation (e.g. DAYS, HOURS etc.)
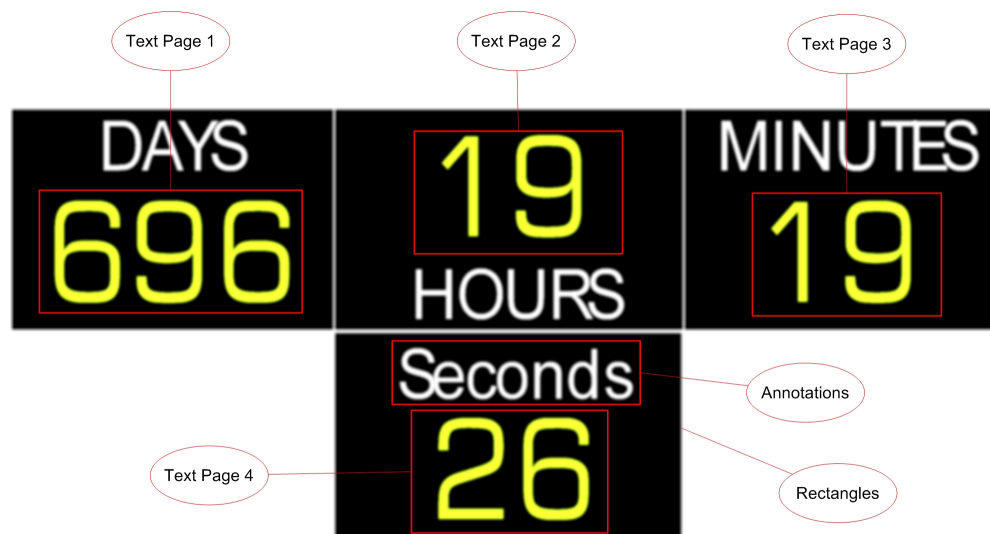
You can now move onto the next step and insert the required animation markers.

Insert animation markers at correct position and configure 1104

NOTE

If desired, you can:

- create any clock component annotations and separators that may be required but NOT animated using separate text pages;
- apply formatting characteristics using the Graphic Tools 266;
- position shapes behind the text pages to improve readability (use the commands in the Graphics 395 menu).

13.2.1.4   Insert animation markers at correct position and configure

Follow the steps below to insert and configure an animation marker at the start of each of the four text pages:

1. With page 1 open for editing in the Graphic Edit window 260, position the text cursor at the start of the first text page and select Text> 408 Markers>Insert>Animation 411. The Animation Marker dialog box 565 appears.
2. Ensure that Static is selected from the Effect drop-down list box 569.
3. Check the Loop box and ensure that a loop duration of 1 second is entered in the Interval increment boxes 571 in the Loop group box 571.

4. Ensure that the On & Off ⌐570⌐ option is selected in the Format group box ⌐570⌐.
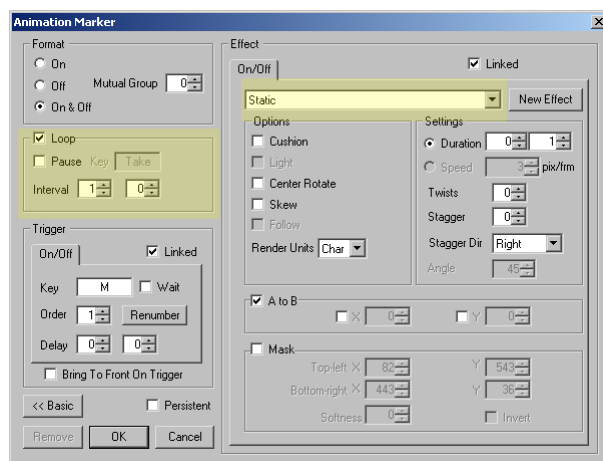
5. Select OK to close the Animation Marker dialog box.

An animation marker is inserted at the start of the text page.

At this point you can either:

- select the inserted animation marker, copy it, and then paste it at the start of the remaining three text pages or;
- repeat the above steps for the remaining three text pages.

At the end of this step you should have inserted four animation markers. You can now move onto the next step and insert the required page template field markers.

Insert page template field markers in correct position ⌐1106⌐

13.2.1.5 Insert page template field markers at correct position

Follow the steps below to insert and configure a page template field marker at the start of each of the four text pages:

1. With page 1 open for editing in the Graphic Edit window 260, position the text cursor at the start of the first text page, but AFTER the animation marker that has been already inserted, then select Text> 408 Markers>Insert>Field 411. A page template field marker with an ID of 1 is inserted.

The Field Settings (Field) control box 283 on the Graphic Tools 266 is automatically selected.

2. Ensure that Center is selected from the Justify drop-down list box. This ensures that any numerals are centred within each component of the clock.
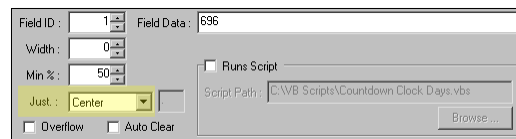
Repeat the above step for the remaining three text pages that make up the completed countdown clock. At the end of this step you should have inserted four page template field markers. You can now move onto the next step and format the fourth page template field marker to run the saved Visual Basic script.

Ensure that page template field 4 runs saved Visual Basic script 1106

13.2.1.6 Ensure that page template field 4 runs saved Visual Basic script

To link the fourth page template field that is applied to the fourth text page (i.e SECONDS in this example) to the Visual Basic script that you saved earlier, follow the steps below:

1. With page 1 open for editing in the Graphic Edit window 260, position the text cursor over the page template text marker in the fourth text page (i.e. SECONDS in this example). The text marker should turn green when selected.
The Field Settings (Field) control box 283 on the Graphic Tools 266 is automatically selected.
2. Ensure that the Runs Script box is checked.
3. Enter the path and file name of the Visual Basic script in the VB Script Path text box. Alternatively, select the Browse button to browse the local or network file system and select a script file e.g.
`C:\Jobs\Scripts\Countdown_Clock.vbs`.
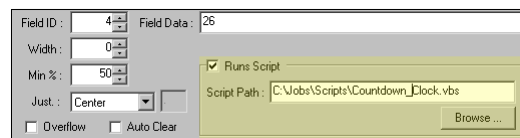
You can now move onto the next step and save the job before going online and playing it out.

Save and playout job 1107

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1106

Copyright © 2000-2006 Pixel Power Ltd.

13.2.1.7 Save and playout job

To save and playout the job, follow the steps below

1. Close the Graphic Edit window [260] that is currently displaying page 1. A message appears asking if you want to save your changes.
2. Select OK to save the changes to page 1.
3. Select File> [378] Save Job [380]. The Save Clarity Job dialog box [781] is displayed. Enter the file path in the Filename text box of the job file that you want to save e.g. `C:\Jobs\Countdown_Clock.ppj`.
4. Select OK to save the job.
5. Ensure that the Playout Controls [343] are displayed (View> [421] Playout Controls [424]).
6. Select Channel 1 from the list of available channels [343].
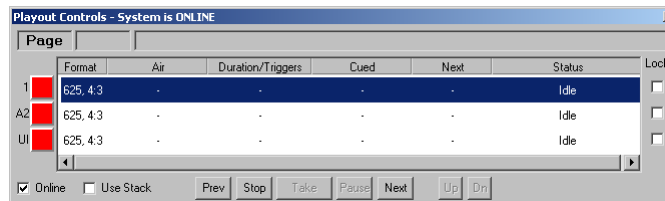
7. Press 1 on the numeric keypad (ensure that NUM LOCK is turned off first) and then Cue. Page 1 is cued and waits for a take.
8. Press Take to take page 1.

Page 1 should begin playout and the clock should begin to countdown using the parameters defined in the connected Visual Basic script file.

SEE ALSO

To customise the example Visual Basic script target date and time parameters, see Target date and time [1107]. To customise the example Visual Basic script page template field ID definition, see Page template field ID definition [1107].

13.2.1.8 Simple customisation of the example Visual Basic script file

13.2.1.8.1 Target date and time

Defines the date and time when the countdown clock will end. Configured using the following section:

```
'Set up target date and time.
Dim TargetDate
TargetDate = DateValue("December 24, 2005")
TargetDate = (TargetDate + TimeValue("11:00:00 AM"))
```

13.2.1.8.2 Page template field ID definition

Defines the page template field ID's used by the script to define the individual clock components. Configured using the following section:

```
'Set up field ID for each of the time elements.
Dim DaysFieldID, HoursFieldID, MinutesFieldID, SecondsFieldID
DaysFieldID = 1
HoursFieldID = 2
MinutesFieldID = 3
SecondsFieldID = 4
```

13.3 Playout and control

13.3.1 Controlling playout using VITC or LTC timecode sources (non-VTR) [CLARITY]

In certain environments, it is often required to playout certain pages at a specific time of day automatically from a master playout Clarity system. The best way to accomplish this to assign timecodes to these specific pages and connect the master playout Clarity system to a master time clock source.

For example, the following pages in a job could be created and formatted with the following timecode values:

Page 1 starts at 10:00:00:00
Page 2 starts at 10:00:10:00
Page 3 starts at 10:00:20:00
Page 4 starts at 10:00:30:00
Page 5 starts at 10:00:40:00

This job can then be loaded, placed online and the first page cued on the master playout Clarity, which is connected to the master time clock source. When the incoming timecode reaches the IN time for each of these pages, the Clarity system responds by taking the associated page to air automatically.

Ideally, the process of loading the job, going online and cueing the first page should be automated in a typical broadcast environment. For this example, it will be completed MANUALLY by the operator.

13.3.1.1 Overview

In this example, you will learn:

- about the two timecode based page modes that Clarity can operate under 1108;
- the hardware requirements and external connections necessary 1109;
- how to configure the software (timecode/VTR configuration 1110 and selection of correct page mode 1111);
- how to monitor the incoming timecode source 1112;
- how to create a simple page sequence 1112 and edit the timecode IN points for each page 1113;
- how to put the Clarity system online and prepare the first page in the sequence 1113;
- understand how resulting page playout is actioned by the timecode source 1114.

13.3.1.2 Assumptions

For this example, we shall assume that:

a) the timecode source is a house master clock;
b) it is an LTC or VITC source;
c) you do not want to use an Easy Reader 1, 2, or 3 LTC/VITC timecode to serial RS232 converter;
c) timecode is distributed either via the house analogue video lock reference (75 Ohm) (VITC) or as a standalone signal (LTC);
d) if a 500 Clarity system is being used, it should be equipped with the LTC/VITC timecode option (H091 LTC Reader PCB);
e) the playout of pages is configured to occur on Channel A and as such the analogue monitor and/or VID OUT connections should be connected in the correct manner within your playout environment so that CG output can be viewed;
f) the Clarity system is not under automation control to facilitate the loading and preparation of jobs/pages.

13.3.1.3 Timecode page modes

There are two timecode page modes that a Clarity system can operate in.

Mode	Description
Subtitle/Timecode	To use the software for outputting pages/subtitles or to enable the control of a job from an edit controller, Easy Reader 2 LTC/VITC timecode reader/generator or other timecode source.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1108

Copyright © 2000-2006 Pixel Power Ltd.

Mode	Description
Internal Timecode	To use the software for outputting pages/subtitles under the control of a Clarity system units' internal timecode generator.

This example will deal with Subtitle/Timecode page mode.

This mode requires an external timecode source. This can be a timecode generator such as a Easy Reader 1 (LTC), Easy Reader 2 (LTC), Easy Reader 3 (VITC), Edit controller or an external clock source (VITC or LTC) usually found in broadcast suites (known a master control clock source).

13.3.1.4   Hardware requirements and rear panel connections

Depending on how your master control clock source is distributed, you will need to connect the source to one of the following connectors on your system rear panel.

IMPORTANT

If your master playout Clarity system is a Clarity 500, is should be suitably equipped with the LTC/VITC timecode option (H091 LTC Reader PCB). Clarity 100 and 200 models feature this functionality as standard.

Timecode Source (see Timecode/VTR [1110] configuration [1110])	Description	Clarity 500 rear panel connector (per channel)	Clarity 100/200/300 rear panel connector
LTC	SMPTE/EBU longitudinal timecode (LTC) as read from the LTC pins on the relevant audio connector on the system rear panel.	AUDIO (15-pin female D-type digital audio port)	GPIO/AUDIO/TALLY /LTC/RS-232/RS-422 (44-pin female HD D-type)
VITC from Analog REF Input	SMPTE/EBU vertical interval timecode (VITC) read from the analogue reference input video on the system rear panel. Clarity decodes the first valid VITC signal it finds within a range of standard scan lines.	REF (75BNC Analogue reference input)	REF (75BNC Analogue reference input)
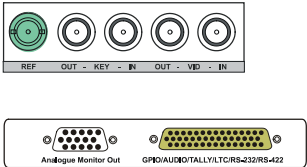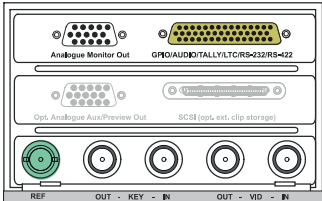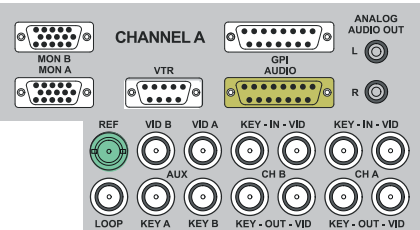
Information regarding the pinouts of rear panel connectors featured in the diagrams above are documented in the following publications.

Part Number	Title	Chapter
H059W003	Clarity Installation, Operational Testing and Maintenance Manual	Rear Panel, Specification and Connectors Clarity and Clarity PREP PC Installation

1109   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

13.3.1.5   Timecode/VTR configuration

Follow the steps below to configure software timecode settings:

1. Start the Clarity software.
2. Select Options> ⌐429⌐Preferences>Local Preferences ⌐430⌐. The Local Preferences dialog box ⌐696⌐ is displayed.
3. Select the Timecode/VTR dialog tab ⌐732⌐.

Configure the settings as shown in the next sections, depending on your rear panel connection:

13.3.1.5.1   LTC read from AUDIO 15-pin female D-type connector (Clarity 500)
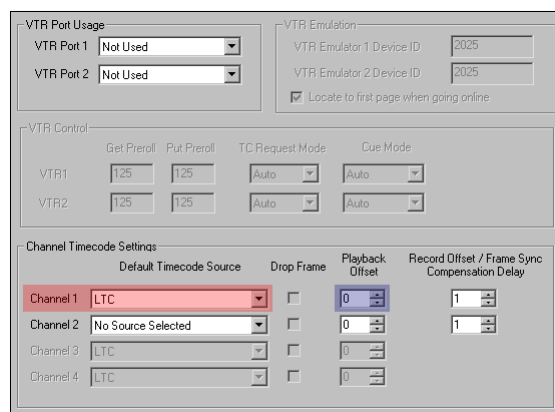
1. Select LTC from the Default Timecode Source drop-down list box ⌐734⌐ for Channel 1 (A) (red shaded area).
2. Due to latency or video delays in other equipment or delays in the master clock source, you may need to adjust the playback offset value for Channel 1. To change the playback offset value, enter a new value in the Playback Offset increment box ⌐735⌐ (blue shaded area) or use the increment and decrement buttons to jog the value up or down.
3. Select OK to close the Local Preferences dialog box ⌐696⌐.

13.3.1.5.2   LTC read from GPIO/AUDIO/TALLY/LTC/RS-232/RS-422 44-pin female HD D-type (Clarity 100/200/300)
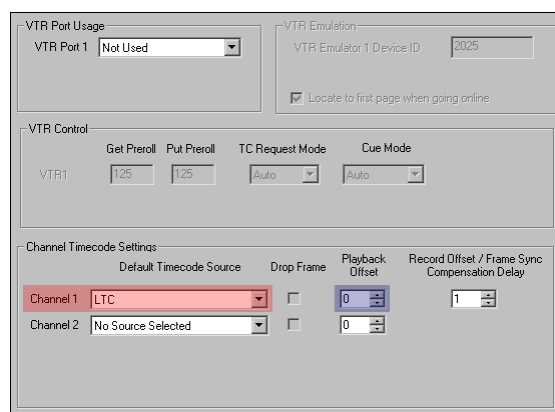
1. Select LTC from the Default Timecode Source drop-down list box ⌐734⌐ for Channel 1 (A) (red shaded area).
2. Due to latency or video delays in other equipment or delays in the master clock source, you may need to adjust the playback offset value for Channel 1. To change the playback offset value, enter a new value in the Playback Offset increment box ⌐735⌐ (blue shaded area) or use the increment and decrement buttons to jog the value up or down.
3. Select OK to close the Local Preferences dialog box ⌐696⌐.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1110

Copyright © 2000-2006 Pixel Power Ltd.

13.3.1.5.3   VITC read from REF BNC connector (All systems)
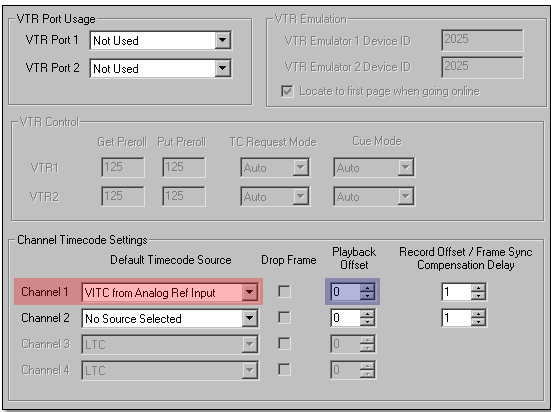
1. Select VITC from Analogue REF Input from the Default Timecode Source drop-down list box [734] for Channel 1 (A) (red shaded area).
2. Due to latency or video delays in other equipment or delays in the master clock source, you may need to adjust the playback offset value for Channel 1. To change the playback offset value, enter a new value in the Playback Offset increment box [735] (blue shaded area) or use the increment and decrement buttons to jog the value up or down.
3. Select OK to close the Local Preferences dialog box [696].

13.3.1.6   Page mode selection

To select the Subtitle/Timecode page mode, select Subtitle/Timecode from the Select Page Mode drop-down list box (red shaded area) on the Job/Page toolbar [248].
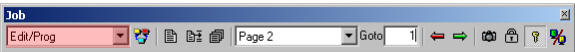
At this point, notice that the Page List expands to show two additional left hand columns. The Timecode In and Timecode Out columns enable timecode values to be viewed and specified for each page.
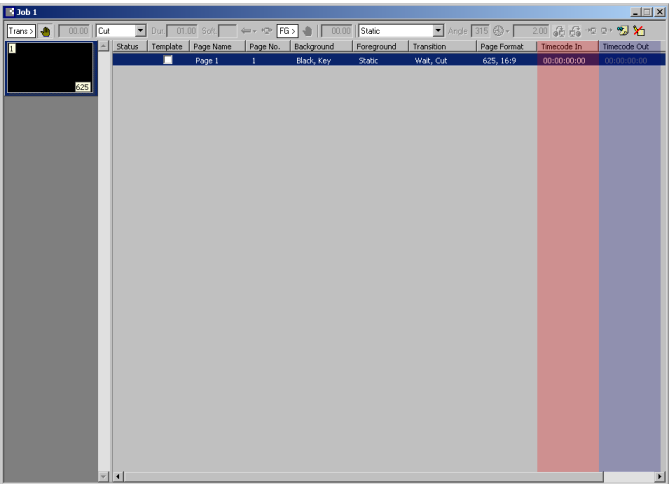
13.3.1.7 Monitoring the incoming timecode

With the timecode source running, select View> [421] Timecode Source Status [424] to display the Timecode Source Status control box [353].

VITC read from REF BNC connector	LTC read from AUDIO 15-pin female D-type connector (Clarity 500)
	LTC read from GPIO/AUDIO/TALLY/LTC/RS-232/RS-422 44-pin female HD D-type (Clarity 100/200/300)

It should indicate that a timecode source is present on the VITC AnalRef or LTC signal (yellow shaded area). If all is well, a green **Valid** indication is given and the adjacent clock should mirror the connected master clock source.

If the NOT FITTED message is displayed, then your Clarity 500 system is not equipped with the LTC/VITC timecode option (H091 LTC Reader PCB) (see Assumptions [1108]).

13.3.1.8 Creating an example job

Follow the steps below to create an example job:

1. Select File> [378] New Job [379]. A new job is opened.
2. Add four new pages using Page> [390] Add New [391].
3. Add text to each of the five pages.

   To do this, double-click on Page 1 to open it within the Graphic Edit window [260]. By default, a text page should be created and the text cursor should be visible.

   Enter the following text:

   ```
   Page 1 under timecode control
   ```

4. Close the Graphic Edit window [260] and select Yes when you are asked if you want to save your changes.
5. Repeat the above process for Pages 2, 3, 4, and 5, changing the text where relevant to the correct page number.

Five pages should now appear in the page list.
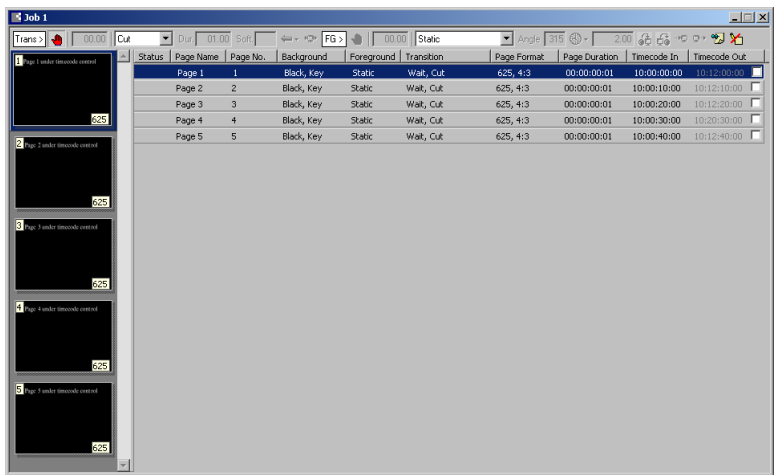
13.3.1.9   Editing timecode IN points

To edit the timecode IN values for each page, follow the steps below:

1. Double-click on the relevant value in the Timecode In column in the Page List [252].
2. The Timecode In/Out dialog box [807] is displayed where you can edit the default 00:00:00:00 value.

3. Do that same for the rest of pages so that you end up with the five page sequence being split by ten second increments.
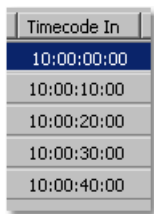
13.3.1.10   Going online and cueing the first page

To put the Clarity system online and prepare the first page, follow the steps below:

1. Ensure that the Playout Controls [343] are displayed (View> [421] Playout Controls [424]).
2. Select Channel 1 from the list of available channels [343].
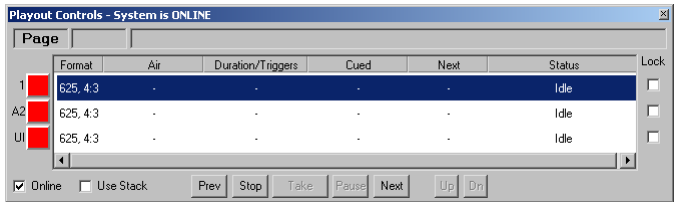
3. Press 1 on the numeric keypad (ensure that NUM LOCK is turned off first) and then Cue. Page 1 is cued and waits for a delay or timecode.

This is indicated by the [clock icon] channel status indicator. 344 If the Preview window 350 for channel 1 is also displayed, then page 1 is previewed.
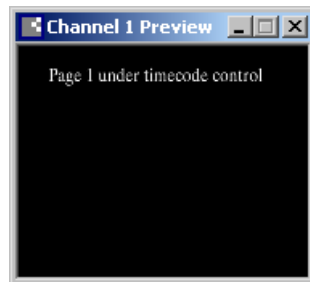
13.3.1.11 Resulting playout actioned by timecode

The diagram below shows the resulting playout flow of pages 1 to 5.
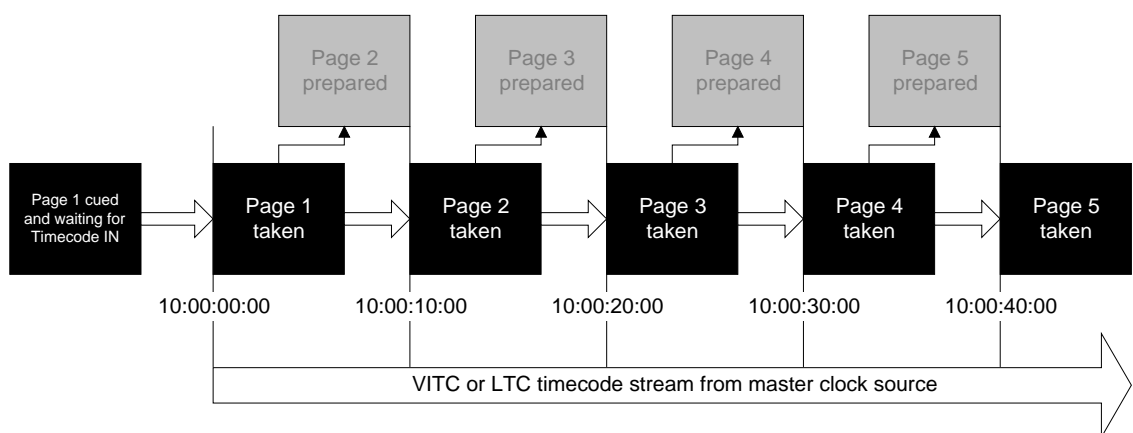
13.4 Effects

13.4.1 Cutting holes in foreground page elements [CLARITY]

Foreground page elements can be configured to cut holes in other foreground layers, showing the content of lower foreground layers. This can create some useful and interesting effects.

In the simplest example, a shape can cut a hole through a picture cutout in the layer below, exposing a background clip.
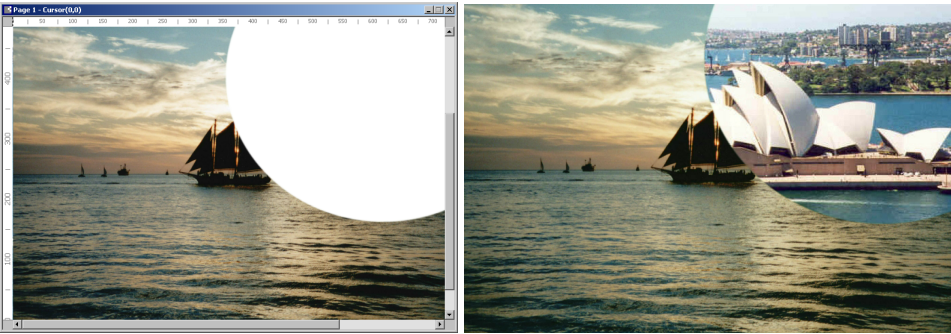
The circle is configured with the Cut hole during playout setting. This setting is configured on the on the :

Once this settings is turned on, it becomes the default setting for all new page elements that are created, typed or inserted.

NOTE

Support for page elements that are configured to cut holes in foreground layers is **ONLY** featured on the main output channel(s) and will not work on the auxiliary channel(s) (if present).

13.4.1.1 Complex masked squeezeback credit roller/promo

This example describes how a masked squeezeback credit roller/promo was created using Clarity.

The effect

The effect that was required was to display a full screen credit roller clip/live B feed, say at the end of a programme. Part way through the credit roller, the clip/live B feed needed to be moved and down sized, providing less emphasis while at the same time, the background live video A promo feed should increase in size to provide more emphasis. At this point a voice over was to be run, describing the promo.

After the voice over had finished, the reverse was to occur. The credit roller clip/live B feed needed to be moved and up sized back to full screen, providing total emphasis, while at the same time, the background live video A promo feed was to disappear.
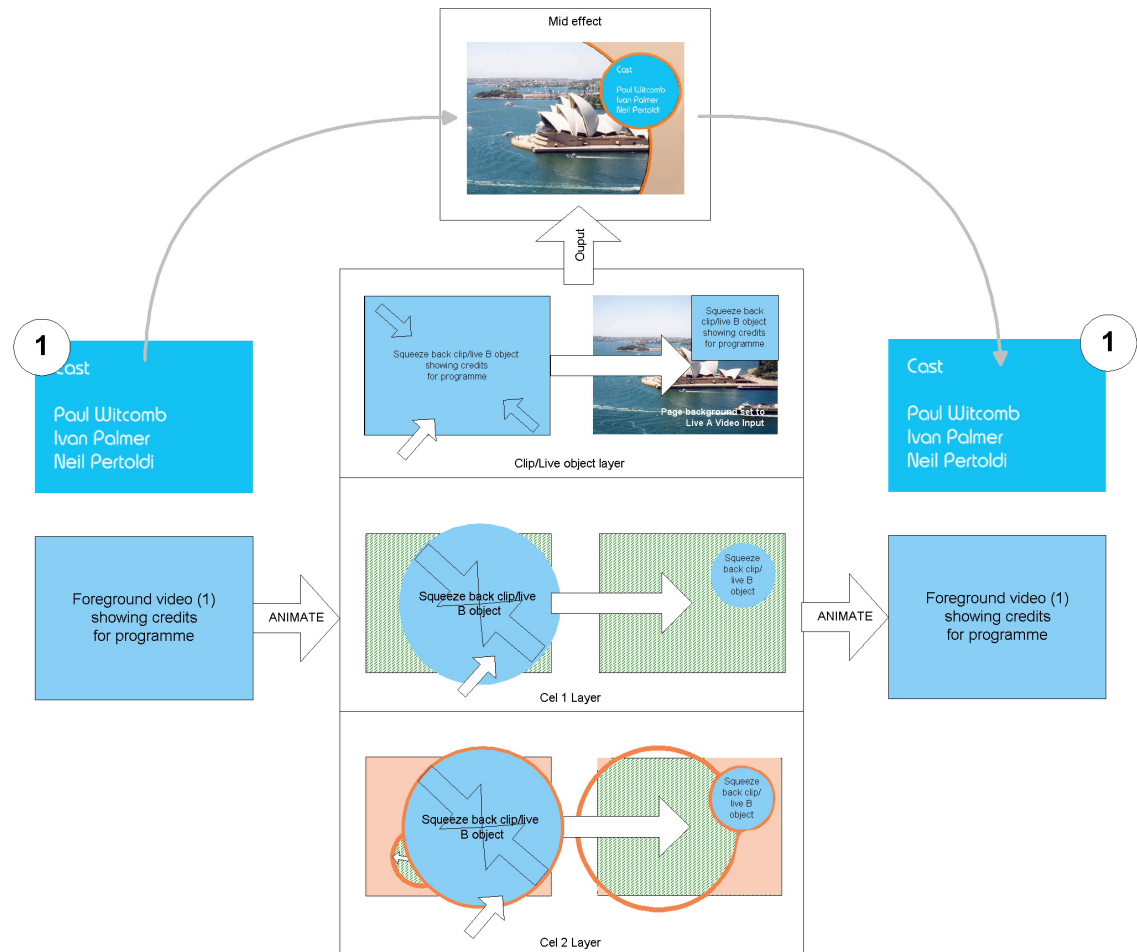
During these transitional periods between the display of the full screen credit roller clip/live B feed at the start and end of the effect, parts of the page are masked by varying amounts using two cel animations.

The cel on layer 1 is configured to cut a hole in foreground objects, thus enabling the clip/live B feed to be seen in the layer below. The green hashed area is a key through which the background live video A feed can be seen.

The cel on layer 2 contains the resizable foreground mask areas (shown in orange) and two transparent bordered circles. Once circle expands to show the background live video A through the key of cel 1 below. The other follows the exact path of the circle in cel 1, showing the hole cut area of cel beneath, which is in turn displaying the credit roller clip/live B feed.

Pre-requisites to job playout

This example was created in 525 NTSC format and as such will require the following:

- the Clarity software and system must be running in 525 line mode. This can be configured using the controls in the <u>System Settings group box</u> $\boxed{794}$ on the <u>SD Hardware Configuration dialog box</u> $\boxed{786}$ (<u>Options></u> $\boxed{429}$ <u>Hardware>SD Settings</u> $\boxed{431}$), without a job currently loaded in the Clarity software.
- 525 line live source(s).
- if you wish to use the resources used in this example (cels etc), please contact <u>Pixel Power technical support</u> $\boxed{103}$.

Job timing

Playout timing of the job is controlled by the having the <u>Internal Timecode page mode</u> $\boxed{244}$ configured which subsequently uses the related Timecode In reference values for each page. As a result of this, after pressing Take once the first page has cued, the job will run automatically until it reaches the final page. Each page is triggered by the system unit internal timecode generator.

13.4.1.1.1 Copy example files

Systems with clip drives

Follow the steps below to copy the necessary files from the supplied CD-ROM to your hard disk and clip drive.

1. Insert the CD-ROM into the Clarity CD-ROM drive
2. Using Windows Explorer, copy the `PPHOLECUTTER` folder to `C:\`.
3. Start the Clarity software and then start the <u>Clarity Explorer</u> $\boxed{362}$ (<u>File></u> $\boxed{378}$ <u>Clarity Explorer</u> $\boxed{382}$).
4. Using the Clarity Explorer, create a folder on the local clip volume called `DemoClips`.
5. Whilst the Clarity Explorer is still displayed, browse the CD-ROM and open the `DemoClips` folder.
6. Copy the `PPHOLECUTTER.PPV` file to the `DemoClips` folder on the local Clip volume. This process should take a few minutes and a progress bar is displayed.

NOTE

The TIFF image sequences for cel animations are located in the `IMAGE_SEQUENCE` folder at the root of the CD-ROM. They do not have to be copied but are included for experimentation in your chosen animation application.

Systems with only live source inputs and NO clip drives

Follow the steps below to copy the necessary files from the supplied CD-ROM to your hard disk.

1. Insert the CD-ROM into the Clarity CD-ROM drive
2. Using Windows Explorer, copy the `PPHOLECUTTER` folder to `C:\`.

NOTE

The TIFF image sequences for cel animations are located in the `IMAGE_SEQUENCE` folder at the root of the CD-ROM. They do not have to be copied but are included for experimentation in your chosen animation application.

13.4.1.1.2 Load, configure and playout job

With the Clarity software running, follow the steps below:

1. Select <u>File></u> $\boxed{378}$ <u>Open Job</u> $\boxed{380}$. The <u>Open Job dialog box</u> $\boxed{750}$ is displayed.
2. Browse to the following folder:

   `C:\PPHOLECUTTER`

3. To open the example featuring clips AND a live video source, select the `PPHOLECUTTER.PPJ` job file and select OK.
   To open the example that uses ONLY live video sources, select the `PPHOLECUTTEREXAMPLE_LIVESQUEEZEBACK.PPJ` job file and select OK.

The job should open and five pages are displayed in the Page Browser [251]/Page List [252], as shown below:
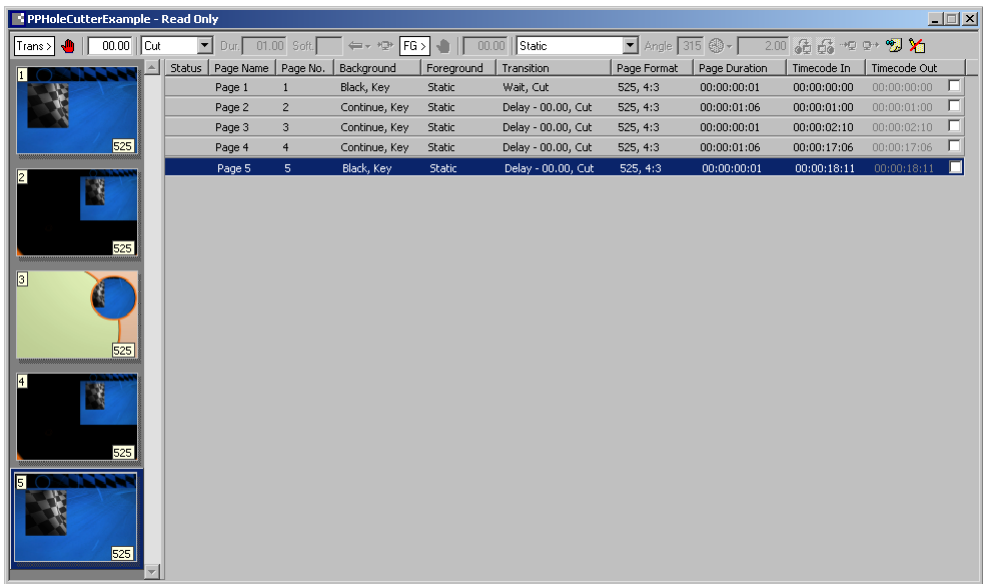
4.   Ensure that the Playout Controls control box [343] is displayed (View> [421] Playout Controls [424]).
5.   Select Online to go online, then prepare page 1 by pressing 1 on the numeric keypad and then Cue.

NOTES

- Refer to the subsequent pages for a description of what happens when each page is displayed and how each page is constructed.
- **Images in subsequent sections are taken from the PPHOLECUTTER.PPJ job file. Where clip object place holders are shown, they can be simply be interpreted as pasted live objects if you are working with the PPHOLECUTTEREXAMPLE_LIVESQUEEZEBACK.PPJ job file.**

13.4.1.1.3   Information about how and why pages are configured

The five pages are configured to have the following page settings:

	1	**2**	**3**	**4**	**5**
Background	Live A	Live A	Live A	Live A	Live A
Foreground	Static	Static	Static	Static	Static
Transition	Wait, Cut	Delay - 00.00, Cut	Delay - 00.00, Cut	Delay - 00.00, Cut	Delay - 00.00, Cut
Page Format	525, 4:3	525, 4:3	525, 4:3	525, 4:3	525, 4:3
Timecode In	00:00:00:00	00:00:01:00	00:00:02:10	00:00:17:06	00:00:18:11

Background settings (Page Settings dialog box> [751] Background dialog tab [756])

Pages 1 to 5 are set to have a live background from the Live A input.

Foreground settings (Page Settings dialog box> [751] Foreground dialog tab [760])

All page foregrounds are set to be static because no foreground motion is desired e.g. text rolls, crawls etc.

Transition settings (Page Settings dialog box> [751] Transition dialog tab [767])

Page 1 is configured to wait for Take keypress. It then cuts straight to page 2.

Pages 2, 3, 4, and 5 are all configured with no waits and a delay of zero. This is because the pages are to be controlled using their respective Timecode In values under the control of the Internal Timecode page mode.

Pages 2, 3, 4, and 5 are all configured to cut into the next page (take the next page with a vertical interval switch operation).

Page Format settings (Page Settings dialog box> `751`**Page Format dialog tab** `765`**)**

All pages are configured in 525 line format and 4:3 aspect ratio to match the US (NTSC) standard system.

Timecode In settings (Page Settings dialog box> `751`**Timecode dialog tab** `767`**)**

After the first initial Take keypress to take page 1, each subsequent page is taken automatically when the Internal Timecode counter reaches the Timecode In point of each page.

13.4.1.1.4 Displaying the Timeline control box

Display the Timeline control box `355` by selecting View> `421`Timeline `424`. It shows graphically, over time, how pages playout out and how different page elements are timed to interact with each other. You can open page elements for editing in the Graphic Edit window `260` by double-clicking on the desired element on the timeline.
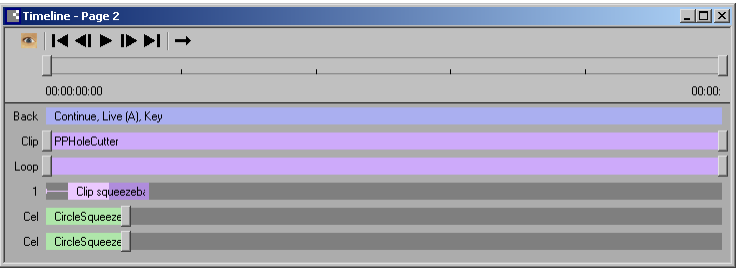
13.4.1.1.5 About the cel animations

This example features four cel animations.

Filename	Used on Pages	Description
CIRCLE_SQUEEZE_HOLECUT_START.CEL	2 (forward) and 4 (reversed)	Overlays the video clip/live B object that is being re-sized with a hole cut area. The green area is a visible key, designed to show the live video A background beneath.
CIRCLE_SQUEEZE_OVERLAY_START.CEL	2 (forward) and 4 (reversed)	Overlays the first cel, following the hole cut area of the first animation with a transparent bordered circle of the same size, enabling the squeezeback to be seen throughout the cel motion. The cel contains resizable foreground mask areas (shown in orange) which expand to mask some of the live B video below. In addition, this cel displays another transparent bordered circular area which originates behind the hole cutting area, expanding right and upwards until is occupies the majority of the screen, showing the video from the live video A background through the green keyed area of the CIRCLE_SQUEEZE_HOLECUT_START.CEL animation.
CIRCLE_SQUEEZE_HOLECUT_MIDDLE.CEL	3 (looped)	Overlays the static resized video clip/live B object with a hole cut area. The green area is a visible key, designed to show the live video A background beneath.
CIRCLE_SQUEEZE_OVERLAY_MIDDLE.CEL	3 (looped)	Overlays the first cel with a static transparent bordered circle of the same size as the hole cut area in CIRCLE_SQUEEZE_HOLECUT_MIDDLE.CEL, enabling the resized squeezeback to be seen throughout the cels' looped playback. The cel contains static foreground mask areas (shown in orange) and another static transparent bordered circular area, showing the video from the live video A background through the green keyed area of the CIRCLE_SQUEEZE_HOLECUT_START.CEL animation.

The animations were exported from two sequences.

Hole cutting sequence (Cel 1)

0-34 (35 frames)	35-100 (66 frames)

Animated frames	Static frames

CIRCLE_SQUEEZE_HOLECUT_START.CEL   CIRCLE_SQUEEZE_HOLECUT_MIDDLE.CEL

Overlay sequence (Cel 2)

0-34 (35 frames)	35-100 (66 frames)

Animated frames	Static frames

CIRCLE_SQUEEZE_OVERLAY_START.CEL   CIRCLE_SQUEEZE_OVERLAY_MIDDLE.CEL
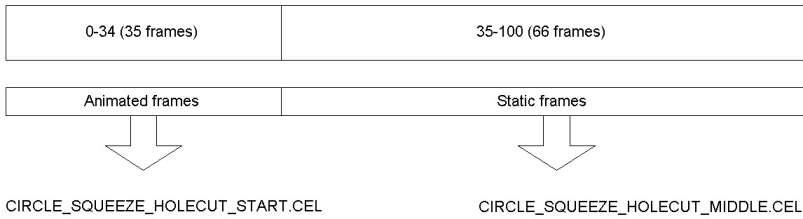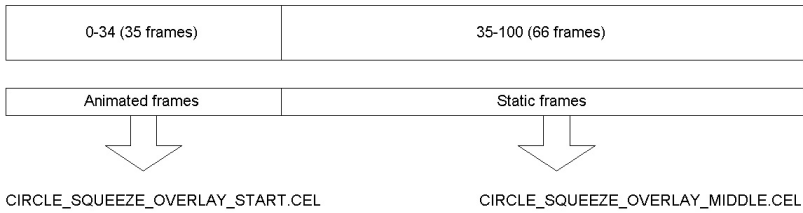
NOTE

The TIFF image sequences for both cel animations are located in the `IMAGE_SEQUENCE` folder at the root of the CD-ROM. They do not have to be copied but are included for experimentation in your chosen animation application.

13.4.1.1.6   Page 1 - Full frame pasted clip/live object

With the system online, press Take to take page 1. It contains a single element. Either:

- a foreground clip (linked to `DEMOCLIPS\PPHOLECUTTER.PPV` on the local clip volume) or;
- a foreground pasted live video object (linked to the Live B video input).

Page construction

The video clip/live object is set to full screen and positioned in the centre of the page.
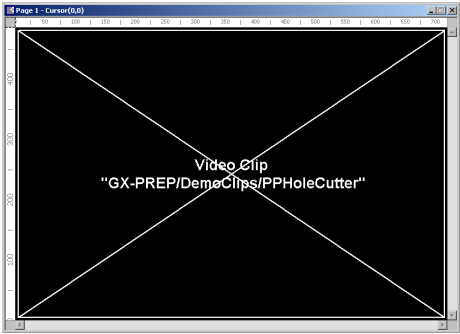
The clip/live object on page 1 is configured NOT to resize by disabling any triggers using the Triggers control tab 296 on the Graphic Tools 266. The tab is configured with the following settings:

Video clip/live source playback/preview

When Take is pressed, clip playback is started or the Live B video feed is previewed. This continues for 1 second (as dictated by page 2's timecode in value of `00:00:01.00`).

NOTES

Clips can be inserted using the Paste Clip tool in the Cel and Clip toolbox 317 on the Graphic Tools toolbar 315.

13.4.1.1.7   Page 2 - Clip/live object squeezeback overlayed by cel animations to mask video playback area

Page 2 is taken automatically after 1 second and 0 frames. It contains three elements layered in the following order:

- a scaled version of the same video clip/ live video object featured on page 1;
- the cel animation `CIRCLE_SQUEEZE_HOLECUT_START.CEL`;
- the cel animation `CIRCLE_SQUEEZE_OVERLAY_START.CEL`.

Page construction

The video clip/live object is positioned in the top right-hand corner of the page. The two cel animations are sized at full screen and are layered on top of each other. To select a graphic object, use the Goto Graphics list box on the [Graphic Tools toolbar](315).
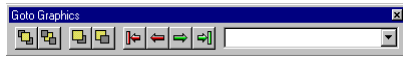
Video clip/live object squeezeback

Page 1 is Cut into page 2 and video clip/live object playback is maintained. The video clip/live object is then squeezed back from full screen size (as on page 1) to its final position, as shown on page 2. This transitional period occurs over 18 frames and starts immediately (i.e. configured to wait for 0 seconds) once page 2 is taken.
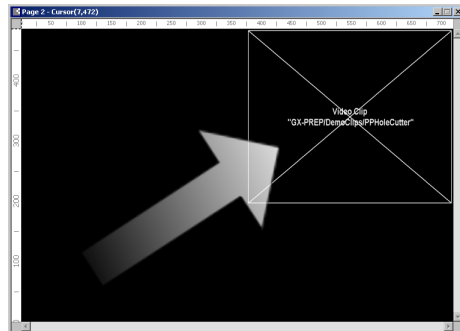
The clip/live object on page 2 is configured using the [Triggers control tab](296) on the [Graphic Tools](266). The tab is configured with the following settings:
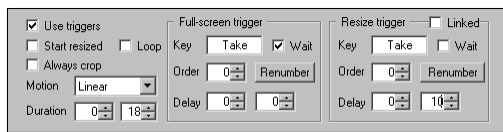
Cel animations

Whilst the video clip/live object is being resized, the cel animations animate in conjunction with each other, over the top of the squeezeback. Both animations are configured to start after the page is taken automatically by the pages' Timecode In reference and configured to play as a one-shot forward cel animation. Both cel animations are set to be interpreted with additive keying.

Both cels' playback settings are configured using the [Cel Playback Settings control tab](274) on the [Graphic Tools](266). You can view how each cel animates by selecting it and then adjusting the Display Frame increment box. The tab is configured with the following settings:
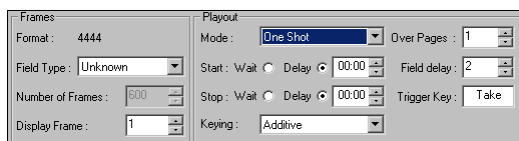
The role of the `CIRCLE_SQUEEZE_HOLECUT_START.CEL` animation is to overlay the video clip/live object that is being re-sized with a hole cut area (see below). The green area is a visible key, designed to show the live video background beneath.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1122

Copyright © 2000-2006 Pixel Power Ltd.
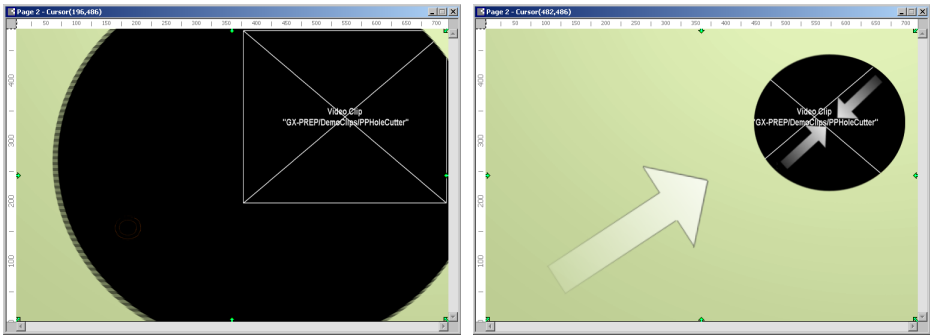
This cel animation is configured with the Cut hole during playout setting, thus ensuring that the transparent area of the cel (the hole) will cut a hole in the foreground to show the pasted video clip/live object in the layer below. This setting is configured on the [Transparency control tab](295) on the [Graphic Tools](266):
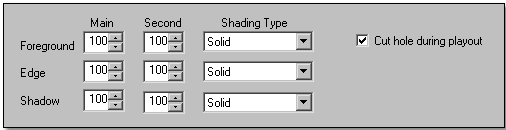
The role of the CIRCLE_SQUEEZE_OVERLAY_START.CEL animation is to overlay the first cel, following the hole cut area of the first animation with a transparent bordered circle of the same size, enabling the squeezeback to be seen throughout the cel motion. The cel contains resizable foreground mask areas (shown in orange) which expand to mask some of the live video below. In addition, this cel displays another transparent bordered circular area which originates behind the hole cutting area, expanding right and upwards until is occupies the majority of the screen, showing the video from the live video background through the green keyed are of the CIRCLE_SQUEEZE_HOLECUT_START.CEL animation.
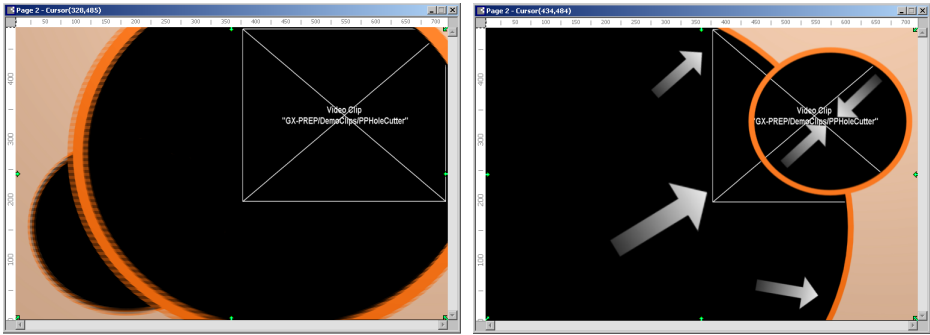
Completed Page 2

After the two cels have played out through their frame range once (35 frames) and the clip/live object has been resized and positioned over the same period, page 2 is completed displaying the following.
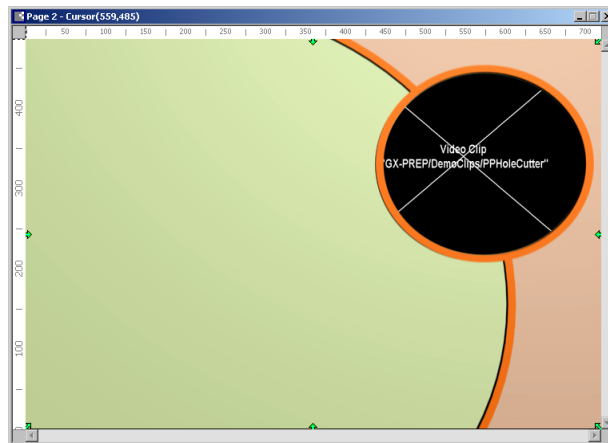
NOTE

Whilst online, the clip/live object ID board is replaced with actual clip content/video input and the green area is replaced by live video from the page background.

13.4.1.1.8 Page 3 - Resized clip/live object playback/preview with overlayed looping cel animations

Page 3 is taken automatically after 2 seconds and 10 frames. It contains three elements layered in the following order:

- a scaled version of the same video clip/ live video object featured on page 1;
- the cel animation CIRCLE_SQUEEZE_HOLECUT_MIDDLE.CEL;
- the cel animation CIRCLE_SQUEEZE_OVERLAY_ MIDDLE.CEL.

Page construction

The video clip/live object is positioned in the top right hand corner of the page. The two cel animations are full screen and are layered on top of each other. To select a graphic object, use the Goto Graphics list box on the Graphic Tools toolbar 315.
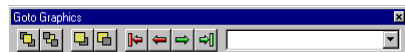
Video clip playback/live object preview

Page 2 is Cut into page 3. The clip/live object maintains its position and continues to play/preview.

Cel animations

Whilst the video clip/live object is playing/previewing in its resized state, the cel animations animate in conjunction with each other, over the top of the video clip/live object. Both animations are configured to start after the page is taken automatically by the pages' Timecode In reference and configured to play in a loop. Both cel animations are set to be interpreted with additive keying.

Both cels' playback settings are configured using the Cel Playback Settings control tab 274 on the Graphic Tools 266. You can view how each cel animates by selecting it and then adjusting the Display Frame increment box. The tab is configured with the following settings:

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1124

Copyright © 2000-2006 Pixel Power Ltd.

13.4.1.1.9 Page 4 - Clip/live object squeezeback overlayed by reversed cel animations to mask video playback area

Page 4 is taken automatically after 17 seconds and 6 frames. it contains three elements layered in the following order:

- a scaled version of the same video clip/ live video object featured on page 1;
- the cel animation `CIRCLE_SQUEEZE_HOLECUT_START.CEL`;
- the cel animation `CIRCLE_SQUEEZE_OVERLAY_START.CEL`.

Page construction

The video clip/live object is positioned in the top right hand corner of the page. The two cel animations are full screen and are layered on top of each other. To select a graphic object, use the Goto Graphics list box on the Graphic Tools toolbar 315.
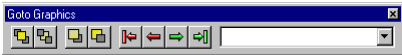
Video clip/live object squeezeback

Page 3 is Cut into page 4 and video clip/live object playback is maintained. The video clip/live object is then squeezed back from its small screen size (as on page 3) to its final position, as shown on page 5. This transitional period occurs over 20 frames and starts after a delay of 10 frames once page 4 is taken.
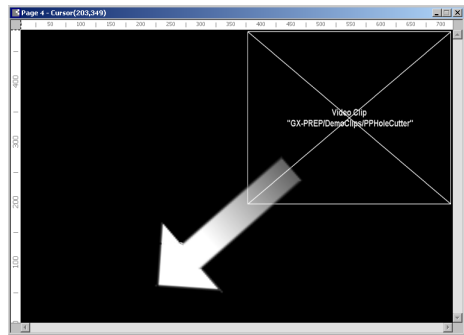
The clip/live object on page 4 is configured using the Triggers control tab 296 on the Graphic Tools 266. The tab is configured with the following settings:
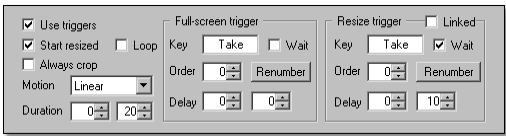
Cel animations

Whilst the video clip/live object is being resized, the cel animations animate in conjunction with each other, over the top of the squeezeback. Both animations are exactly the same as those used on page 2 and are configured to start after the page is taken automatically by the pages' Timecode In reference. Both cel animations are set to be interpreted with additive keying.

The difference between these iterations and those on page 2 is that these copies of the cel are configured to play as a one-shot reverse cel animation. Both cels' playback settings are configured using the Cel Playback Settings control tab 274 on the Graphic Tools 266.

Refer to Page 2 - Clip squeezeback overlayed by cel animations to mask video playback area 112 for more information on how the cels perform (but in REVERSE).

13.4.1.1.10   Page 5 - Full frame pasted clip/live object

Page 5 is taken automatically after 18 seconds and 11 frames. It contains a single element. Either:

- a foreground clip (linked to DEMOCLIPS\PPHOLECUTTER.PPV on the local clip volume) or;
- a foreground pasted live video object (linked to the Live B video input).
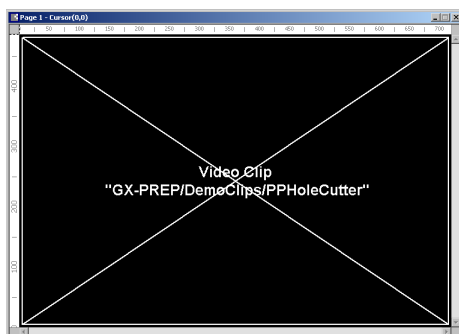
Video clip/live source playback/preview

Page 4 is Cut into page 5. The video clip/live object maintains its new position full screen size and position and continues to play/preview.

NOTE

Clips can be inserted using the Paste Clip tool in the Cel and Clip toolbox ⌐317⌐ on the Graphic Tools toolbar ⌐315⌐.

Section 14

Glossary
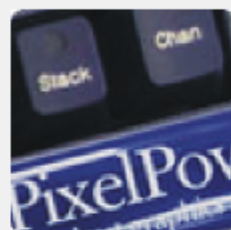
14. Glossary

Numerics

.CGM	**Computer Graphics Metafile**
	A vector-based file format.
.PPC	Clarity cell animation file
.PPI	Clarity image file
.PPJ	Clarity job file
.PPL	Clarity logo font file

A

ANSI	The American National Standards Institute character set. It consists of 256 characters; the first 128 are the same as the ASCII character set.
ASCII	**American Standard Code for Information Interchange**
	A set of codes used to represent letters, numbers, control characters and symbols, originally designed for teletype systems and widely used in computers. The seven-digit (or bit) binary number set has 128 codes. IBM increased the number of characters to 256 (the IBM extended-ASCII set) by using eight-bit codes when it introduced its personal computer (1981); other operating systems use different eight-bit sets.
Associated Field	Information linked to a text page that can be updated using the Global Fields Manager dialog box.
Autobox	A box that is automatically drawn around selected text within a text page. Specified using the Autobox control tab on the Graphic Properties control box.
Animation	The movement of elements on the foreground of a page.

B

Bitmap texture	Bitmap textures can be applied to the background of a page or page element. A bitmap texture is tiled to cover the entire area of a selected page or element background.
BNC	Connector used for connecting co-axial cables.
BMP	**Windows Bitmap Format**
	BMP is the native bitmap file format of the Microsoft Windows environment. It efficiently stores mapped or unmapped RGB graphics data with pixels 1-, 4-, 8-, or 24-bits in size. Data may be stored raw or compressed using a 4-bit or 8-bit RLE data compression algorithm. BMP is an excellent choice for a simple bitmap format which supports a wide range of RGB image data.

C

Cache (Image)	A portion of a Clarity system units total RAM (Random Access memory) that can be defined to temporarily store images, enabling the software to access image information quickly.
Cel	A single picture that forms part of an animation.
Character code	The number that corresponds to a character in a character set, such as the ASCII or ANSI character sets.
Check box	A square box in a dialog or control box used to enable or disable an option. An option is enabled when an X or check mark appears in the check box, and it is disabled when the check box is empty. Click inside a check box to enable or disable the option.
Chrominance	The colour information (UV) transmitted in a YUV video signal.

14. Glossary

Code Page	A means of providing support for character sets and keyboard layouts for different countries or regions. A code page is a table that relates the binary character codes used by a program to keys on the keyboard or to characters on the display.
Collapse	The process of adding all page elements stored on the foreground layer to the background layer.
Cool Moves	A series of animation effects that can be applied, using animation markers, to text within a text page.
Crawl	A foreground transition effect where elements in the foreground (shape, text page etc.) can be made to crawl across a page from right to left. Movement from left to right is know as a Reverse Crawl.
Cursor	A bright, blinking, movable indicator on a page, marking the position at which a text line, spline or page can be entered, corrected, or deleted.
Cushion	Gradual acceleration and deceleration at the start and end of an animation effect.
Cutout	An bitmap image that usually has key channel information assigned.

D

Dolby E	Dolby E is a professional audio coding developed to assist the conversion of broadcast and other two-channel facilities to multi channel audio. It allows an AES/EBU audio pair, or a single pair of digital VTR audio tracks, to carry up to eight channels of broadcast-quality audio for post production and distribution. Among other benefits, Dolby E encoded audio can be edited, decoded, and re-encoded many times without audible degradation. http://www.dolby.com/professional/pro_audio_engineering/solutions_dolbye.html
Dialog box	A window that is displayed when the Clarity Software needs additional information in order to perform an action or command. For example, when you select the Open command to open a job, the Open dialog box appears, prompting you to specify a file name and location.
D-type	A connector widely used for the connection of video or display based IT equipment.
Downstream Keying	The merging of Clarity generated graphics and any externally supplied video which is performed "downstream" (after the vision mixer but before transmission).

E

Edge	The area that surrounds a page element (shape, text line etc.).
Ethernet	Local area networking technology.

F

Field	A fixed position item within a text page that can be updated manually or automatically.
Frame Grab	To capture a frame of video from a selected source.
Foreground	A page has two definitive layers - foreground and background. The foreground layer holds all editable page elements.

G

Glow	An edge effect, that, when applied to a page element, gives the impression that it is glowing. Specified using the Edge Effects control tab on the Graphic Properties control box.
Glyph	A graphical representation of a character, sometimes several characters or only a part of character. In the simple case, for a given font (typeface and size), each character corresponds to a single glyph but this is not always the case, especially in a language with a large alphabet where one character may correspond to several glyphs or several characters to one glyph (a character encoding).
Gouraud	A method of smoothly shading between colours.
Graphic Edit Window	The window where you can edit the foreground and background of a selected page.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Grid	A series of evenly spaced horizontal and vertical lines used to help draw and arrange elements on a page. You can use the controls on the Grid Settings dialog box to set grid parameters. For greater accuracy, you can also have elements on your page snap to the grid when they are drawn or moved.

H

Handles	A set of arrows or squares that appear at the corners and sides of a page element when it is selected. By dragging individual handles, you can scale, resize, or adjust parameters that are particular to the selected element.

I

Interpolation	To estimate a value of (a function or series) between two known values.

J

Job	A sequence of one or more pages.
JPEG	**Joint Photographic Experts Group** JPEG is a standard for representing images that was created in the late 1980s. There are many different modes of JPEG including baseline lossy [1132], lossless [1132], progressive and hierarchical. The baseline mode is the most popular mode and supports only lossy coding. There is a lossless-only mode of JPEG, but it never gained popular acceptance and is largely obsolete. JPEG baseline divides an image into 8x8 blocks and compresses
Justify	To adjust the spacing within a text page so that the lines end evenly at a straight margin.

K

Kerning	The adjustment of space between pairs of characters, usually in display type, so that the overall spacing of the letters appears even.
Key	A video signal that represents transparency rather than colour.
Key Channel	A video stream comprises the colour information and also the transparency information on a pixel by pixel basis. The Key Channel is that part of the stream which carries the transparency information.

L

Logo	An image (company logo etc.) that can be inserted into a text page in the same manner as a text character and as a result utilise the features available to text page characters i.e. Cool Moves etc.
Luminance	The brightness of a picture.
Lossy	Lossy compression techniques involve some loss of information. As a result, the original image cannot be exactly reconstructed. In other words, the image you get out of decompression isn't quite identical to what you originally put in. In return for accepting varying levels of distortions and artifacts in the reconstruction, higher compression ratios are possible. JPEG is the most common form of lossy compression.
Lossless	Lossless compression, as the name implies, involves no loss of information. If an image has been losslessly compressed, the original data can be recovered exactly from the compressed data. Lossless image compression is used primarily for archiving, since people want to save all of the original data. TIF and LZW-TIF are commonly used lossless compression schemes. Generally, images can be losslessly compressed at rates of about 2:1.

M

Markers	Used to denote starting and ending points for animations.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   1132

Copyright © 2000-2006 Pixel Power Ltd.

14. Glossary

Menu	A list of commands that appear when you click on a menu name in the Menu Bar. Click on a menu name to display a list of commands used to access various functions.

Q

QuickLoads	QuickLoads enable favourite jobs to be associated to designated shortcut key combinations. These can be configured for both the local system (see Local QuickLoads dialog tab [722] on the Local Preferences dialog box [696]) and on a per-user basis (see the User QuickLoads dialog tab [821] on the User Preferences dialog box [809].

P

Page	A section of a job consisting of:
	a background layer containing a raster bitmap picture;
	a foreground layer containing foreground elements.
Page Browser	Part of the Page View window that displays a graphical representation of each page.
Page List	Part of the Page View window that displays information about page names, transitions and backgrounds and foreground transitions.
Palette	The range of colours available for use when applying colour to a page element.
Pixel	The smallest image-forming unit of a video display.
Polygon	A closed plane figure bounded by three or more line segments.
Postscript Type 1	A classification that Adobe Systems Incorporated specified for font creation. Type 1 fonts exist on UNIX and Windows based system as well as the Mac, but the files are not cross platform compatible.

R

RGB	A colour mode that contains three components: red (R), green (G), and blue (B).
RLE	**Run Length Encoding**
	Data files frequently contain the same character repeated many times in a row. For example, text files use multiple spaces to separate sentences, indent paragraphs, format tables & charts, etc. Digitized signals can also have runs of the same value, indicating that the signal is not changing. For instance, an image of the nighttime sky would contain long runs of the character or characters representing the black background. Likewise, digitized music might have a long run of zeros between songs. Run-length encoding is a simple method of compressing these types of files.
	A good example of a generalized run-length scheme is PackBits, created for Macintosh users. Each byte (eight bits) from the input file is replaced by nine bits in the compressed file. The added ninth bit is interpreted as the sign of the number. That is, each character read from the input file is between 0 to 255, while each character written to the encoded file is between -255 and 255. To understand how this is used, consider the input file: 1,2,3,4,2,2,2,2,4, and the compressed file generated by the PackBits algorithm: 1,2,3,4,2,-3,4. The compression program simply transfers each number from the input file to the compressed file, with the exception of the run: 2,2,2,2. This is represented in the compressed file by the two numbers: 2,-3. The first number ("2") indicates what character the run consists of. The second number ("-3") indicates the number of characters in the run, found by taking the absolute value and adding one. For instance, 4,-2 means 4,4,4; 21,-4 means 21,21,21,21,21, etc.
Roll	A foreground transition effect where elements on the foreground (shape, text page etc.) can be made to roll up through a page from bottom to top. Movement from top to bottom is know as a Reverse Roll.
RS422	**Recommended Standard 422**
	A serial communications standard. Clarity system units use RS422 ports to communicate with VTR's.

S

Safe Area	The part of the screen inside which it is "safe" to create graphics and captions.
Saturation	Vividness of hue; degree of difference from a grey of the same lightness or brightness.
SCSI	**Small Computer System Interface**
	A set of evolving ANSI standard electronic interfaces that allow personal computers to communicate with peripheral hardware such as disk drives, tape drives, CD-ROM drives, printers, and scanners faster and more flexibly than previous interfaces.
SDI	**Serial Digital Interface**
Smart Moves	A series of animation effects that can be applied, using animation markers, to text contained within a text page.
SMPTE	**Society of Motion Picture and Television Engineers**
	A professional association for enhancing the profession and contributing to the technology of motion picture and television engineering. The SMPTE establishes standards, practices, and guidelines for the motion picture and television industry, including the audio that goes with the motion images.
SVGA	**Super Video Graphics Array**
	A display standard for IBM PC and compatible computers that offers better resolution than VGA (Video Graphics Array).
Stack	A collection of pages created in sequence.
Style	Formatting information (font, colour, spacing etc.) that can be applied in part or to the whole of a text line, spline or page.

T

TGA	**Truevision Advanced Raster Graphics Adapter (TARGA)**
	Format by Truevision, Inc, used to support image capturing; used with a series of high-resolution graphics adaptors released under the TARGA name
TIFF	**Tagged Image File Format**
	Many image file formats have an image header with fixed fields containing information such as image dimensions, colour space specification, etc. The TIFF file format is different in that it allows for a flexible set of information fields. There exists a specification for many of these information fields, called 'tags', ranging from the most fundamental, like image dimensions, over the most luxurious like copyright information, up to so-called 'private tags' or 'custom tags' that you can define to hold your own application specific information. The TIFF specification defines a framework for an image header called 'IFD' (Image File Directory) that is essentially a flexible set of specifically those tags that the TIFF writer software wishes to specify. The clear benefit of this scheme is that almost any information can accompany an image, while little information is absolutely needed, and image headers remain as lean as possible. There is little overhead, and enough flexibility to suit any need.
Toolbar	A collection of tools grouped by the type of functionality that they offer the user.
Tooltips	To find out what a tool does, point the cursor at it. After a few moments a yellow tip appears, displaying the name of the tool you are pointing at.
Transition	The movement from one page to another.
Transparency	The ability to see through an item. The opposite of transparent is opaque. Setting lower levels of transparency causes higher levels of opacity and less visibility of the underlying items or image.

14. Glossary

V

VPB	**Video Paint Box Format (Quantel)**
	VPB is an open file format developed by Quantel for efficient storage and manipulation of high resolution image files. Three different file types are supported, Video VPB is based on YUV CCIR 601 and VPB RGB or CMYK used in connection with Quantel's range of Graphic Arts products. The format supports pictures, cut-outs, and stencils, as well as optional browse images. VPB offers several important advantages with particular regard to speed of access as well as control of image resolution and colour space.
VTR	**Video Tape Recorder**

Y

YUV	Model used in broadcast television to represent colours. The Y is the luminance or brightness and the UV the colour of the picture.

Index

Index

Index

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Index

10/10/2006, 15:03 CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Index

Index

C

Index

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Index

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Index

Index

Index

Index

Index

Index

Index

Index

Index

Index

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Index

10/10/2006, 15:03   CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006

Copyright © 2000-2006 Pixel Power Ltd.

Index

Index

Index

Index

P

Index

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Index

Index

Index

Index

Index

CG Tools, Supporting Applications and Tools Reference - H059W004_Rev02_D, DRAFT D, CG Tools version 7.1.2.1, 10/10/2006   10/10/2006, 15:03

Copyright © 2000-2006 Pixel Power Ltd.

Index

software
    log off   384
    menus   378
    new features   46, 47, 52, 69, 74, 79
    playback channel   429
    program group structure   119
    reference manual   435
    starting   120
    start-up preferences   817
    support agreement   115
    supported features   806
    update/revert mode   812
    user settings   809
    version   435

software derivatives   8, 806
    cg   9
    gx   9
    tg   9

software playout   32

software preview channel   818
    disabling   818
    field only   819
    frames   819
    interlaced   819

solid   288, 295, 305, 323, 626, 674, 759

sony
    embedded audio standard   699

sort by video channel   328

Sorted   1001

source   610
    analogue monitor (sd)   790
    audio   649

source file format   271, 275

source job   613, 617

source job directory   617

source job to create package from   617

source live a   764

source live b   764

source machine   611, 617

source selection   821

source zip archive   808

spaces   269, 543

spacing
    protect   293

SpacingBetweenElements   947, 994

spares   104

special characters   544

speed   256, 276, 581, 763
    cel animation   589
    clip   589

speed in pixels per field   581

speed motion marker   519, 520

spell check dialog box   802

spell checker   11

spell checking   802
    adding words   802

    changing words   802
    entire job   387
    ignoring all text   802
    ignoring text   802
    text elements   387
    text pages   387

spelling   546
    checking text   546
    importing new words   546

spin (smart)   533

spiral horizontal   464

spiral vertical   464

spline
    beta   311, 407
    bezier   311, 407
    closed   311, 407
    cubic   311, 407
    drawing   402
    filled   311, 407
    height and width   311
    line width   311
    open   311, 406
    static control area   311
    vertex editing mode   399
    x and y position   311

splines and polygons   490
    anatomy   490
    drawing   491, 492
    editing and configuring   492
    modes   491
    types   491

split horizontal   440, 770

square   285

square pixels   630

squeezeback   440, 770

stack   248
    opening   750
    resetting   384

stagger   581

stagger direction   581

standard definition   13

standard features all products and derivatives
    software playout   32

standard keyboard   178

standard moves   11, 534
    cut   534
    fade   535
    flash   535
    limitations   534
    type   535
    wipe   535

standard toolbar   247

standby   361

star   492
    drawing   401, 493
    editing and configuring   493
    sides   312
    static control area   312

Index

Index

Index

Index

Index

xml
    users.xml   172
xml table creator   858, 864
XmlDataFile   905, 911, 1000
XMLHelpIDMap.xml   116

Y

year   626
yuv   277, 599
    analogue monitor (sd)   790
    colour format   633, 635
    conversion to rgb   771
    conversion type   772
    graphics display adapter   825
    sampling type   274
yuv conversion settings dialog box   826

Z

zip
    creating archive   616
    unpacking job from archive   381, 808
zoom
    100%   425
    1600%   426
    200%   425
    25%   425
    3200%   426
    400%   426
    50%   425
    800%   426
    graphic edit window   262
    in   425
    out   425
zoom (smart)   534
zoom fade (smart)   534
zoom focus (smart)   534
zoom toolbox   321

UK Office

Pixel Power Ltd.
College Business Park
Coldhams Lane
Cambridge CB1 3HD
England

Tel: +44 (0) 1223 721000
Fax: +44 (0) 1223 721111

US Office

Pixel Power Inc
1000 West McNab Road
Pompano Beach FL
USA 33069

Tel: (954) 943-2026
Fax: (954) 943-2035

PixelPower
broadcast graphics solutions